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REPORT

OF

THE COMMITTEE OF DIRECTION

ON

COOPERATIVE FARMING

GOVERNMENT OF INDIA
MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION
(DEPARTMENT OF COOPERATION)
1965

PROF. D. R. GADGIL,
Chairman,
Committee of Direction
on Cooperative Farming

NEW DELHI,
September 23, 1965

Dear Shri Dey,

I present herewith the report of the Committee of Direction which was appointed by the Government of India to assess the progress and evaluate the performance of pilot projects in cooperative farming

Yours sincerely,
D. R. GADGIL

Shri S. K. Dey,
Chairman,
National Cooperative Farming
Advisory Board and Minister,
Community Development & Cooperation,
Government of India,
New Delhi.

REPORT OF THE COMMITTEE OF DIRECTION ON COOPERATIVE FARMING

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CHAPTER I

INTRODUCTORY

The concept of cooperative farming originated in the desire to encourage farmers, particularly small land-owners, to group themselves together voluntarily in order to make a better and more economic use of resources through joint management. Whilst various traditional forms of cooperative activity have been followed by the agriculturists of this country since time immemorial, as a matter of State policy, cooperative farming has a recent beginning. After Independence—in the three Plans, cooperative farming has been assigned an important role. Based on the recommendations of the Nijalingappa Committee, during the III Plan, a programme of organising 318 pilot projects was undertaken. These projects were to demonstrate the benefits of cooperative farming and help in evolving suitable techniques in operation and management.

1.2. *Appointment of Committee of Direction*—The National Cooperative Farming Advisory Board and the 1963 Conference of State Ministers of Cooperation stressed the need for evaluating the pilot projects. This would bring to light, in good time, the weaknesses and problems facing the programme in order that necessary correctives could be applied and the experience gained utilised for the development of the programme on sound lines. In pursuance of these recommendations, the Government of India, Ministry of Community Development and Cooperation, in the Memorandum No. 10-9/63-CF dated 9th July, 1963 (Appendix I) appointed a Committee of Direction for the assessment of progress and evaluation of the pilot projects. The Committee had the following members:—

1. Prof. D. R. Gadgil, Director, Gokhale Institute of Politics and Economics, Poona—*Chairman.*
2. Sardar Gurbaksh Singh, President, Progressive Workers' Cooperative Farming Society, Khempur, Distt. Rampur (U.P.)—*Member.*
3. Prof. A. M. Khusro, Institute of Economic Growth, Delhi University—*Member.*
4. Shri Ameer Raza, Joint Secretary, Ministry of Food and Agriculture—*Member.*
5. Dr. J. P. Bhattacharjee, Director, Programme Evaluation Organisation, Planning Commission, New Delhi—*Member.*
6. Shri S. C. Chaudhri, Economic & Statistical Adviser, Ministry of Food and Agriculture—*Member.*
7. Shri M. P. Bhargava, Commissioner (Cooperation), Ministry of Community Development and Cooperation—*Member—Secretary.*

1.3. *Terms of Reference*—The terms of reference of the Committee were:

(a) To examine the question of (i) base line survey regarding economic condition of members, (ii) progress of a society *vis-a-vis* other societies and individual farms, (iii) attitude survey and to devise methods, techniques and organisational

PART I

THE BACKGROUND

set up for the same;

(b) To analyse the data collected in the field and formulate conclusions;

(c) To report the achievements and difficulties of the programme and suggest measures for solving the problems;

(d) To make or help in the detailed study of the specific operational aspects *e.g.*, preparation of production programmes, employment schemes, cooperative farm management, etc., and

(e) To undertake such other cognate measures as are germane and relevant to the scheme of assessment of progress and evaluation of pilot projects.

1.4. *Plan of Work*—The Committee held seven meetings as indicated below:

No. of meeting	Date	Place
First	27-7-63	Delhi
Second	27-12-63	Bombay
Third	24-8-64	Delhi
Fourth	10-2-65	Delhi
Fifth	25/26-3-65	Poona
Sixth	13/14-8-65	Poona
Seventh	3-9-65	Delhi

1.5. The Committee decided that the field studies for the assessment should be entrusted to the agro-economic research centres, as they had considerable experience in conducting socio-economic studies and were well-acquainted with the agricultural conditions of the regions. The names of the centres and the States studied by each centre are given below:

Sr. No.	Name of the Centre	States entrusted for study
1	Agro-Economic Research Centre, Poona	Maharashtra and Mysore.
2	Agro-Economic Research Centre, Madras	Andhra Pradesh, Madras and Kerala.
3	Agro-Economic Research Centre, Delhi	Punjab, U.P. and Delhi.
4	Agro-Economic Research Centre, Visva-Bharati	Orissa, Bihar and West Bengal.
5	Agro-Economic Research Centre, Vallabh Vidyanagar	Gujarat and Rajasthan.
6	Agro-Economic Research Centre, Jorhat	Assam.
7	Agro-Economic Research Centre, Gwalior	Madhya Pradesh.

1.6. While entrusting the work to the agro-economic research centres, the Committee laid down certain broad guidelines about the objectives and the requirements of the survey. A copy of the guidelines circulated to the centres on 14th August 1963, is given in Appendix

II. In the light of the broad guidelines suggested by the Committee, the agro-economic research centres selected areas for survey in consultation with the State Governments and formulated their schedules and questionnaires, methods of investigation etc. The periods during which the field investigations were carried out by the centres are given below:

Centre	Duration
Maharashtra	Oct., 1963 to April, 1964.
Madras	Sept., 1963 to April, 1964.
Delhi	Nov., 1963 to Feb., 1964.
Visva Bharati	Jan. to May, 1964.
Vallabh Vidyanagar	Jan. to March, 1964.
Jorhat	January to March, 1964.
Gwalior	October, 1963 to Feb., 1964.

After completing the field studies, the data collected were analysed by the centres. The final reports prepared by these centres were received by the Committee by December 1964. The dates of receipt of the various reports were as follows:

Centre	Date of receipt
Poona	31st October, 1964—report for Mysore. 30th November, 1964—report for Maharashtra.
Madras	25th May, 1964—report for A.P., Madras and Kerala.
Delhi	14th December, 1964—report for Panjab, U.P. and Delhi.
Visva Bharati	August, 1964—report for West Bengal. 17th November, 1964—report for Orissa and Bihar.
Vallabh Vidyanagar	21st December, 1964—report for Gujarat and Rajasthan.
Jorhat	4th October, 1964—report for Assam.
Gwalior	3rd August, 1964—report for Madhya Pradesh.

The reports received from individual centres were studied by the Committee. In addition, in certain cases, additional data were also obtained. Thereafter, the state-wise summaries of the results of investigation were prepared and placed before the Committee.

1.7. *Coverage and Methodology of Investigation*—In view of the complex nature of the programme, the committee decided that an intensive analysis of selected areas and societies would give a deeper insight into the functioning of the programme than broad-based statistical enquiry. The Committee suggested that the centres follow the case study method as far as possible. The selection of pilot projects was made on the basis of a purposive sample with a view to studying both successful and unsuccessful experience. In the selection of the projects/societies, the following were taken into account:

(a) existence of a sizeable number of societies in the pilot project;

(b) societies in pilot projects started in June, 1962, or earlier, having at least one agricultural season to their credit;

(c) preference to societies set up by traditional farmers;

(d) collective farming societies set up on Government waste lands and

(e) old cooperative farming societies preferably in the pilot districts, which had been working for at least 3 years and in a stabilised condition, were also taken up for study.

In addition, data regarding the present position of the societies studied by the Working Group on Cooperative Farming, in 1960, was obtained through the Registrars of Cooperative Societies.

1.8. As the majority of the societies had worked for only one agricultural year, the data available were limited. Since the procedures of record keeping differed widely from state to state and even within each State, it was difficult to institute comparison between the data obtained. In addition, the ability of the Secretaries of the societies to maintain accounts also varied. The field studies, therefore, apart from drawing upon the available records, depended to a considerable extent on the enquiries made from members and non-members. As the studies were conducted by different agro-economic research centres, they varied in content and emphasis. Whilst relying principally on the data included in the reports of the agro-economic research centres, the Committee has also drawn upon other information obtained by it regarding the programme. The agro-economic research centres will be publishing their individual reports separately. For the societies case studied, fictitious names have been used in the report.

1.9. Out of 70 projects started in 1961-62, the study covered 35 projects in 14 States and the Union Territory of Delhi. A total of 165 societies were studied. Of these, 132 were joint farming socities and 33 collective farming societies. 134 societies were located in pilot areas and 31 in non-pilot areas. Of the 165 societies, 106 societies were studied by the case-study method and schedules were convassed for 59 societies. 14 joint farming societies and 18 collective farming societies had completed more than three agricultural years at the time of survey. The details of the projects and the societies studied in each State are given in the following table:

TABLE

Agro-economic research centre	State	Total No. of projects studied	Societies		Total
			Pilot	non-pilot	
1	2	3	4	5	6
Poona ..	.. Maharashtra	3	35	7	42*
	Mysore	2	11	2	13
Delhi ..	.. Punjab	3	11	2	13
	U.P.	5	14	4	18
	Delhi	1	2	1	3
Madras ..	.. Madras	2	2	1	3
	Andhra Pradesh ..	2	3	6	9
	Kerala	2	2	1	3
Jorhat ..	.. Assam	2	3	2	5
Gwalior ..	.. Madhya Pradesh ..	3	15	2	17
Visva-Bharati ..	.. Orissa	2	9	1	10*
	Bihar	2	4	..	4
	West Bengal	2	2	..	2
Anand ..	.. Gujarat	2	8	..	8*
	Rajasthan	2	13	2	15*
		35	134	31	165

***For 31 societies in Maharashtra, 8 societies in Gujarat, 15 societies in Rajasthan and 5 societies in Orissa, schedules were convassed.**

1.10. *Pattern of Report*—Part I: Introductory: Review of Progress. Part II: Summary of the results of investigation. Part III: Assessment and recommendations. Part IV: Summary of Recommendations and Appendices.

1.11. *Acknowledgements*—We are grateful to the agro-economic research centres for readily undertaking the surveys on a priority basis, in spite of the pressure of many competing items of study undertaken by them. Our thanks are also due to the Directorate of Economics and Statistics (Ministry of Food and Agriculture) for their interest in the survey. We are grateful to the Department of Cooperation of the States who extended unstinted assistance to the centres and provided them with the facilities required for conducting the survey.

We would like to place on record our appreciation of the invaluable services rendered to the Committee by Shri V. Dayal, Director and Shri C. R. Hiremath, Assistant Director of the Ministry of Community Development and Cooperation and by the staff under them in the conduct of its work and in the preparation of the report.

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CHAPTER II

REVIEW OF PROGRESS

In this chapter, the historical growth of cooperative farming in the country is being reviewed. In particular, the overall progress in the Third Plan is being indicated as, it is in this context, that the necessity was felt for an assessment of the progress and an evaluation of the performance of the societies formed.

2.2. *Historical Background*—Cooperative farming in India is not a new concept. From time immemorial, farmers have helped one another with improved seed and implements, whilst mutual aid at the time of harvesting, weeding and other farm operations has been common. The 'phad' system of Kolhapur (Maharashtra) and the 'gonchi' system of Andhra Pradesh represent two traditional forms of joint cultivation As a measure of state policy, however, cooperative farming was first suggested in 1944, by the Advisory Board of the Imperial Council of Agricultural Research in their memorandum on the development of agricultural and animal husbandry in India.

2.3. Almost simultaneously, the subject of cooperative farming received attention in the Plan of Economic Development formulated in 1944. The Bombay Plan, as it was commonly known, stated:

> "Increase in agricultural production presupposes certain fundamental reforms. The most important question to be solved is that of the size of agricultural holdings. The average holding at present is not more than 8 acres scattered over the village in tiny fragments. Although there may be definite limits to the advantages arising out of consolidation of holdings and increase in their size, it is one of the main reforms which would be necessary for the adoption of intensive farming. To bring it about, cooperative farming appears to present less difficulties than any other method that may be suggested. It increases the size of the holding for purposes of cultivation without depriving the cultivators of their right to the ownership of their existing holdings. In order that cooperative farming should come into vogue as early as possible, some measure of compulsion appears desirable."

2.4. It will be seen from the above extract, that not only cooperative farming, but also a measure of compulsion was advocated in the Bombay Plan.

2.5. The Cooperative Planning Committee which examined this subject in 1945, was of the view that for a permanent solution of the problem of increased agricultural production, some form of large-scale cultivation was necessary. It, therefore, suggested the organisation of four types of 'cooperative farming' societies, namely, (i) better farming, (ii) tenant farming, (iii) joint farming and (iv) collective farming societies.

2.6. The Agrarian Reforms Committee, appointed on a recommendation of the State Revenue Ministers Conference (1947), emphatically recommended that individual farming should not be allowed on holdings which are smaller than basic holdings. Instead, it suggested that such holdings should, in the course of time, be brought under a scheme of cooperative joint farming.

2.7. The role of cooperative farming in the reorganisation of the rural economy was, therefore, stressed both in First and the Second Plans. The First Plan suggested that "small and middle farmers, in particular, should be encouraged and assisted to group themselves, voluntarily into cooperative farming societies". The second Plan envisaged that "the main task is to take such essential steps as will provide sound foundations for the development of cooperative farming, so that over a period of 10 years or so a substantial proportion of agricultural lands are cultivated on cooperative lines". It also laid down that cooperative farming necessarily involves the pooling of land and its joint management.

2.8. The seminar on cooperative farming convened by the Indian Society of Agricultural Economics at Poona in May, 1958, took the view that the most appropriate objective of a cooperative farming society is to make a more economic use of pooled resources *i.e.*, land, the instruments of production, labour etc. It was felt that, normally, such an organisation would not be able to operate without the pooling of lands.

2.9. In January, 1959, the Nagpur Resolution of the Indian National Congress defined the role of cooperative farming in the country as follows:

> "The future agrarian pattern should be that of cooperative joint farming in which the land will be pooled for joint cultivation, the farmers continuing to retain their property rights, and getting a share from the net produce in proportion to their land. Further, those who actually work on the land, whether they own the land or not, will get a share in proportion to the work put in by them on the joint farm.
>
> As a first step, prior to the institution of joint farming, service cooperatives should be organised throughout the country. This stage should be completed within a period of three years. Even within this period, however, wherever possible and generally agreed to by the farmers, joint cultivation may be started."

2.10. Thereafter, in March, 1959, the Lok Sabha adopted the following resolution:

> "This House recommends that during the next three years every possible effort should be made to organise service cooperatives all over the country and to develop the spirit of cooperation in general so that cooperative farms may be set up voluntarily by the people concerned wherever conditions are mature."

2.11. During discussions in the Lok Sabha, Shri Jawaharlal Nehru further emphasised the voluntary character of cooperative farming and stated:

"I shall go from field to field and peasant to peasant begging them to agree to it. Knowing that if they do not **agree,** I cannot put it in operation."

2.12. Consequent to these developments, in June, 1959, the Government of India appointed a Working Group on Cooperative Farming, under the chairmanship of Shri S. Nijalingappa to help in the formulation of a programme based on available experience. The Working Group published its report in December, 1959. Its recommendations were then discussed in a Conference of State Ministers held at Srinagar in June, 1960, and thereafter in a series of meetings between the Central Ministries concerned, the Planning Commission and the Reserve Bank of India. The proposals so formulated were placed before the National Development Council in September, 1960, which approved the broad guiding principles suggested. The present programme, undertaken in the Third Plan, is largely based on the recommendations of the Working Group.

2.13. *Programme in the Third Plan*—The Third Plan indicates that, in the main, cooperative farming has to grow out of the success of the general agricultural effort through the community development movement, the progress of cooperation and credit, the growth of rural industry and the fulfilment of the objectives of land reform. It also stresses that the contribution of cooperative farming to rural progress will be significant in the measure in which it develops as a voluntary mass movement under genuine local leadership and as a logical growth of community development and cooperation at the village level.

2.14. For the Third Plan, Government of India accepted a programme for the organisation of 318 pilot projects at the rate of 1 per district, each project having 10 societies. For this purpose, within the selected districts, pilot societies were to be organised in one or two contiguous community development blocks. These blocks were to be carefully selected, preference being given to those blocks in which cooperative and panchayati raj institutions had made headway and where suitable conditions existed.

2.15. In addition to the organisation of societies in pilot areas, the growth of societies in other areas was also to be encouraged and assisted. It was felt that, at this stage in the programme, apart from the pilot projects, it was neither necessary nor desirable to lay down targets for the number of cooperative farming societies to be set up during the Third Plan. It was, however, stated that the objective of the Second Plan should be kept in mind, namely, the building up of sound foundations for cooperative farming, so that, over the next ten years or so, a substantial proportion of the agricultural lands were cultivated on cooperative lines. The State Governments were requested to formulate programmes in a realistic manner, and make necessary financial provision, for societies which were to be formed outside the pilot projects.

2.16. A total provision of nearly Rs. 11 crores was made in the Third Plan for the cooperative farming programme. Of this, about Rs. 5 crores was provided for pilot projects in the plans of the States. An additional allotment of Rs. 6 crores was set apart at the Centre for assisting the development of cooperative farming societies in other areas.

2.17. *Broad Guiding Principles*—The basic policies of Government of India regarding the programme were communicated to the States in two letters dated 23rd September, 1960, and 29th November, 1960, respectively. The first indicated the pattern of organisational and financial assistance, administrative, educational and training arrangements, and the targets considered feasible during the Third Plan. The second indicated the broad guiding principles to be borne in mind in organising societies in pilot areas. These included the following:

(i) The societies should be organised voluntarily. There should be no compulsion in any form.

(ii) The bulk of the members should be small cultivators or landless persons or both.

(iii) Membership of cooperative farming societies should be confined to those who are prepared to work on the farm or in its ancillary activities. Absentee land owners should not ordinarily be admitted as members. Persons who are prevented from participation in farm work on account of physical disability, government service, age, sex, or owning land in more than one village may be admitted although they may not participate in farm work. The absentee landholders, taken together as a group, should not exceed 1/4th of the total membership of the society.

(iv) Land should be pooled for a minimum period of 5 years. Withdrawal during this period might be allowed in exceptional circumstances, *e.g.*, a member leaving the village.

(v) Intensive cultivation through labour intensive methods should be the main activity of the farm. However, ancillary activities like poultry, dairying, cottage and small scale industries should also be promoted. Maximum utilisation of local resources should be stressed.

(vi) Good working conditions and better human relations should be created; they reduce tensions and facilitate working together.

(vii) Societies organised merely for securing financial assistance should not be helped.

(viii) The programme of consolidation of holdings should be coordinated with cooperative farming. It would be desirable to start pilot project societies in areas where consolidation work has been completed or where it is in progress. Consolidation of holdings should, however, not be a prerequisite to the formation of societies.

2.18. Apart from the principles enunciated above, emphasis was laid down on the proper selection of pilot project areas, the relationship of the programme with panchayati raj and cooperative institutions, as also with organisations such as the Khadi and Village Industries Commission. Emphasis was also laid on the imperative need of obtaining full technical and financial support from these institutions. In addition, the role of cooperative farming, in the wider context of the community development movement, and the overall scheme of village development as a whole, was also stressed.

2.19. In brief, the pilot projects aimed at being planned experiments and catalytic agents for further expansion of the programme. Their purpose was to evolve suitable techniques of organisation, operation and management for village development as visualised in the plans.

2.20. *Financial Assistance*—It was emphasized that cooperative farming societies should be eligible for assistance on a priority basis from under the various schemes which provide for assistance to individual cultivators. For this purpose it was suggested that, wherever necessary, the rules governing such assistance should be suitably revised.

2.21. In addition, a specific pattern of assistance was approved under the cooperative plan. This was as follows:

Sr. No.	Item of assistance	Total amount per society	State's share %	Centre's share %
1	2	3	4	5
	Loans:			
1	Share contribution (the contribution made by the State will not exceed the amount of the shares raised by the members of the society)	2,000	25	75
2	Medium and long-term loans for land development	4,000	25	75
3	Godown-*cum*-cattle shed (in the ratio of 1 : 5) ..	3,750*	16⅔	83⅓
	Subsidies:			
1	Godown-*cum*-cattle shed	1,250*	50	50
2	Managerial subsidy (over a period of 3 to 5 years as decided by the State Govt.)	1,200	50	50

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*Where facilities exist for storage of produce and keeping of cattle, the loan component of Rs. 3,750 may be used for land development.

2.22. The various items of assistance indicated above, were to be available equally both to pilot and non-pilot societies, with the exception that state participation in share capital was restricted only to pilot societies. As between the Centre and the States, about 78 per cent of the assistance was to be provided by the former, and the remainder by the latter. Initially, the Central assistance to non-pilot societies was to be provided outside the State plan ceilings. As a result of this, a large number of societies were organised outside the pilot project areas in the first two years of this Plan. Therefore, from 1963-64, the Central assistance for the programme was provided outside the State Plan ceilings both for pilot and non-pilot societies. In addition, the original limit of organising 10 societies in a pilot project was removed. At the same time, the pattern of assistance was also modified to entitle non-pilot societies to receive share capital participation in the same manner as pilot societies.

2.23. In certain states, it was observed that funds under the cooperative plan were not being promptly released. As a result, in these areas, there were a large number of under-financed societies. Whilst there has been an improvement in the position since 1964-65, it is evident that the programme suffered at times for want of funds even from the cooperative plan.

2.24. It has been suggested that the funds available in the schematic block budget should be made available to cooperative farming societies on a preferential basis. Though instructions on this point have now been issued by most State Governments, the flow of assistance has generally not been adequate.

2.25. Similarly, the Ministry of Food and Agriculture issued instructions emphasising the need for financial assistance from G.M.F. and other schemes. This matter was followed up from time to time and, now, specific instructions have been issued by the Agriculture and Animal Husbandry Departments of the States of Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madras, Madhya Pradesh, Maharashtra, Orissa and Uttar Pradesh. Here again, actual assistance available from these departments has not been uniformly satisfactory, though since 1964-65 there has been a marked improvement in certain states. Thus, Maharashtra Government earmarked an amount of nearly Rs. 38 lakhs for soil conservation and minor irrigation works, on the lands of cooperative farming societies, in the last year of the Third Plan. In states like Madhya Pradesh and Uttar Pradesh, also, the quantum of assistance has begun to increase. The State Governments have now been asked to plan and ensure the deployment of resources from the various departments in such a manner that the requirements of cooperative farming societies for irrigation, double cropping etc., are met on the basis of a realistic plan of action. It has also been suggested that a coordinating machinery be established at the state level to review periodically the progress in this regard.

2.26. Cooperative farming societies are also eligible to receive funds from the Khadi and Village Industries Commission. Reports indicate that in Madhya Pradesh, Gujarat and Uttar Pradesh funds are frequently being made available. In other states, the position is still difficult.

2.27. The importance of associating the cooperative financing agencies with the programme has been frequently stressed. In order to ensure that production finance is adequately provided to cooperative farming societies, it was suggested that (a), short-term credit be related to the actual production programme of a society. The crop should be the security for the loan, a charge being created for this purpose wherever the law enables this. (b), Cooperative farming societies should be required to give an undertaking to market their produce through the marketing society, which should recover the loan due to the central banks; and (c), the advances given to cooperative farming societies by the Central Cooperative Banks should be taken into consideration for the purpose of the proposed government contribution to the special bad debt fund at 1 per cent of the additional loan given by them for agricultural production over and above the loan given in the preceding year. These grants, which have subsequently been raised to 2 per cent in respect of loans to cooperative farming societies, should be shared equally by the Centre and the States.

2.28. A review of the present position indicates that whilst, in principle, it has generally been accepted that short-term credit should be made available in this manner, a great deal remains to be done to ensure the flow of funds from cooperative banks to cooperative farming societies. Whilst some of the central cooperative banks have provided resources according to the production requirements of cooperative farming societies, there has generally been a reluctance to do so.

2.29. In Dhulia (Maharashtra), the central cooperative bank formulated a special procedure for financing cooperative farming societies according to their production programmes. The scale of crop was also increased as the cooperative farming societies sold their produce through the marketing societies. Thereafter, various other banks in Maharashtra and Madhya Pradesh took action to meet the requirements of cooperative farming societies for short-term credit on the basis of their production plans. In Orissa, the central cooperative bank of Sambalpur district also played a vital part in assisting the programme. On the other hand, in certain other states, the position remained difficult. In Madras, production finance was provided only on the basis of a government guarantee. In Andhra Pradesh, despite such a guarantee, funds did not flow. In Bihar, cooperative farming societies were generally denied assistance—members having to apply for loans in their individual capacity. In Punjab, clean credit for short-term purposes was provided up to an amount of Rs. 5,000 thereafter, societies were expected to mortgage their lands.

2.30. As regards medium and long-term loans, it was suggested that cooperative farming societies should secure their requirements from the central cooperative banks and land mortgage banks. To the extent that the societies were unable to secure funds in this manner, resources were to be provided by government. With this in view, the pattern of assistance under the Cooperative Plan, contained a provision of Rs. 4,000 per society for programmes of land development etc. The additional requirements of cooperative farming societies were to be met, to the maximum extent possible, from out of the provisions available in the agricultural sector of the plan and those in the schematic budget of the community development blocks. Experience shows that the cooperative farming societies have, however, had to depend chiefly upon finance under the cooperative plan. In a few areas, like Dhulia (Maharashtra), Sambalpur (Orissa) and Bhopal (Madayh Pradesh) medium-term loans have been provided by the central cooperative banks. Long-term loans from the land mortgage banks have not been forthcoming.

2.31. *Technical and Administrative Guidance*—The qualitative performance of societies cannot be ensured without adequate technical guidance. It has been emphasized that cooperative farming should form an integral part of the block programme and that the special staff posted under this programme should work under the administrative control of the Block Development Officer. In addition, the State Governments are taking action to ensure that the job-charts of the Extension Officers, Agriculture, Animal Husbandry and Industry are expanded to include regular visits to cooperative farming societies.

2.32. The role of Panchayati Raj bodies, the Collector, and district level officers has also been spelt out in detail. It has been emphasized that the area covered by cooperative farming societies should be treated as "package areas for intensive development". Comprehensive instructions have been issued in this regard in Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madras, Madhya Pradesh, Maharashtra, Orissa and Uttar Pradesh. As a result, it hs been observed that since 1964-65 the flow of financial assistance has markedly increased in some states like Maharashtra and Madhya Pradesh. In the States of U.P., Gujarat and Orissa, the quantum of assistance from the various departments has also begun to increase.

2.33. To ensure that the programme is adequately guided from the State level, the appointment of a whole-time Joint Registrar or Deputy Registrar, and, in addition, a Deputy Director (Agr.), exclusively for cooperative farming has been suggested. Andhra Pradesh, Madhya Pradesh, Uttar Pradesh and Rajasthan have appointed whole-time Joint or Deputy Registrars for cooperative farming. Bihar has posted a Deputy Director (Agriculture) to look to the agricultural aspects of the programme. In Maharashtra, such a post has also been sanctioned. In Orissa, an officer of the rank of District Agriculture Officer has similarly been posted. In Gujarat, the Deputy Director (Extension) has been asked to supervise the technical aspects of the programme. In addition, it has been suggested that technical staff should be strengthened in those districts and blocks where the number of societies is large. In Maharashtra, twenty six additional posts of Extension Officers (Agriculture) have recently been sanctioned for blocks in which the programme has made headway. In Sambalpur District (Orissa), where there is a concentration of societies, the technical staff of the district and block has been supplemented by the appointment of two agricultural overseers exclusively for the programme.

2.34. As managerial skill is absolutely essential for the proper working of societies, the pattern of financial assistance provides a sum of Rs. 1,200 as managerial subsidy to each society. In addition, however, it was felt that, in the early years of the movement, the secretaries/managers of societies would need to be fully trained. Till such time as they are fully acquainted with their duties, it was considered essential that they be assisted by special V.L.Ws. posted to pilot areas. As a consequence, over 250 VLW's have, so far, received special orientation training. They have, thereafter, been posted in the field. Apart from the VLW, the Ministry of Community Development and Cooperation has emphasized that, in each pilot project, there should be at least one pilot project officer of the rank of an extension officer. It has also been stressed that the pilot project officer should preferably have an agricultural background. Generally, it has been observed that pilot project officers have been drawn from the State Cooperative Departments. In 1964-65, however, this trend has been corrected in certain states. Thus, in Gujarat, in addition to a cooperative inspector, an agriculture inspector is also being appointed. In certain states like Andhra Pradesh, Bihar, Mysore and West Bengal, however, minimum staff suggested for pilot projects has not been appointed. In Madras, the State Government has appointed an official of the rank of an inspector as the manager of each pilot society. In addition, a fieldman has also been posted to assist him.

2.35. To plan and promote the programme, the Working Group on cooperative farming recommended the constitution of Cooperative Farming Advisory Boards both at the Centre and in the States. Accepting this recommendation, the Government of India set up a National Cooperative Farming Advisory Board to review the progress of the programme, coordinate inter-state development and experience, suggest measures to foster the peoples' initiative and leadership and help in the formulation of schemes. The National Cooperative Farming Advisory Board has held six meetings so far. In addition, its executive committee has held eight meetings. In 14 states, Advisory Boards have also been constituted; in 1 state, a sub-committee of the State Cooperative Council has been entrusted with the responsibility of guiding the programme.

2.36. *Training and Education*—In consultation with the National Cooperative Farming Advisory Board, a comprehensive scheme was prepared for training and education. The scheme covers three main aspects; (a) the training of secretaries/managers of cooperative farming societies; (b) the organisation of orientation courses for extension staff and non-officials; and (c) education of members and prospective members through village camps.

2.37. Secretaries of cooperative farming societies receive training in a course extending over six months. The purpose of the training is, firstly, to provide the secretaries with a minimum theoretical background of basic subjects such as farming and cooperation. Secondly, to equip them with necessary knowledge and skill concerning these subjects and thirdly, to acquaint them intimately with their duties and responsibilities in a cooperative farming society. It has, therefore, been emphasized that training centres established for the programme should provide adequate facilities for practical work. So far, 13 cooperative farming training wings have been set up at the rate of 1 per state. Out of these, 10 are attached to extension training centres, two are attached to cooperative training schools situated near extension training centres and one *i.e.*, in Maharashtra, has recently opened under the guidance of the state cooperative union and is located in the premises of an extension training centre. Only in West Bengal has a training centre still to open. As, in Jammu and Kashmir, the number of cooperative farming societies is small, secretaries from this state are expected to receive training in Nabha (Punjab).

2.38. The programme of training was reviewed in March, 1964, in a meeting called of principals and instructors of the cooperative farming training wings. About 70 per cent of the overall training capacity has been utilised. So far, 1,000 secretaries/managers have been trained.

2.39. In order to orient extension staff in cooperative farming, three-week courses are to be held in the training centres. So far, orientation courses have been held in 8 states *i.e.*, Gujarat, Madras, U. P., Punjab, Kerala, Madhya Pradesh, Maharashtra and Mysore.

2.40. Reports indicate that, in 10 states, a total of about 200 village camps have so far been organised. These camps have generally been very useful. However, the desired extent of inter-departmental coordination has not been available in all cases.

2.41. It is also proposed to associate the National Cooperative Union of India with the member education programme. Recently, a group of 37 instructors underwent a course in cooperative farming. They will be posted to districts in which cooperative farming has made headway.

2.42. In addition four All India Orientation courses have been held for VLWs who have been posted under the programme. Over 250 VLWs have received training.

2.43. In order to facilitate an exchange of experience, study tours have been organised both in 1962-63 and 1963-64. Teams from each state visited three other states. In addition, 2 states have organised inter-district tours within the state itself.

2.44. Teams of Members of Parliament have also visited cooperative farming societies in pilot projects. 46 M.P.s have participated in these tours.

2.45. Pamphlets entitled "Cooperative Farming Policy and Programme" and "Cooperative Farming—Questions and Answers" have been prepared. They have been translated into all the regional languages. Individual State Governments have also been preparing articles of successful cooperative farming societies. In some states, hand-books for field workers have also been prepared.

2.46. In consultation with All India Radio, radio rural forums are being utilised for publicising the programme. In most of the States, broadcasts have been arranged on the subject.

2.47. A film entitled "All for One" has been prepared by the Government of India in 14 languages. Copies of the film are made available to the State Cooperative unions and state publicity departments.

2.48. *Progress in the organisation of societies*—Towards the end of the Second Plan, *i.e.*, in June, 1960, there were 1,597 joint farming societies in the country. As some of these did not satisfy the criteria for cooperative farming societies, they had to be reclassified and reorganised. Some others had to be weeded out.

2.49. In the first four years of the third Plan, the progress in the organisation of societies has been as under:

(a) Progress upto 31-3-1965

Particulars	1961-62	1962-63	1963-64	1964-65	Total
Pilot	226	639	756	662	2,283
Non-Pilot	142	702	527	651	2,022
	368	1,341	1,283	1,313	4,305

(b) Number, membership and area upto 31-3-1965

Particulars	No. of societies	Membership	Area (in acres)	Average membership	Average area (in acres)
Pilot	2,283	39,296	2,27,425	17·2	99·4
Non-P	2,022	44,133	2,34,734	21·8	116

2.49. The state-wise progress of the scheme in the Third Plan upto 30-6-65, has been as follows:

State	Programme for pilot socs. in the Third Plan	Pilot			Non-Pilot		
		No.	member-ship	Area (inacres)	No.	Member-ship	(Area (in acres)
1	2	3	4	5	6	7	8
1. Andhra Pradesh ..	200	54	1,580	6,432	78	4,434	8,713
2. Assam*	110	58	1,334	4,622	63	2,113	10,819
3. Bihar	250	39	627	1,250	38	693	2,477
4. Gujarat	250	55	751	10,782	66	1,514	15,058
5. J. & K.	80	10	351	1,514	3	138	1,779
6. Kerala	90	77	2,352	2,784	92	4,730	3,011
7. Madhya Pradesh ..	300	231	3,496	33,522	172	3,234	18,569
8. Madras@	120	46	1,387	3,641	7	157	451
9. Maharashtra ..	300	227	3,342	24,007	483	9,853	74,349
10. Mysore@	190	234	4,360	23,417	130	3,432	14,479
11. Orissa@@	130	70	1,347	4,378	25	451	2,670
12. Punjab	200	295	3,677	28,356	419	5,285	40,573
13. Rajasthan*	300	189	2,305	30,619	121	1,764	20,296
14. Uttar Pradesh ..	450	610	10,458	50,580	309	5,191	25,916
15. W. Bengal*	160	67	1,231	1,755	67	1,413	2,041
Union Territories							
16. Delhi	10	7	132	739	3	11	104
17. Himachal Pradesh ..	10	8	105	320	..	..	..
18. Manipur	10	18	589	1,284	10	585	1,007
19. Tripura†	10	1	17	34	4	368	2,076
20. Pondicherry	10	2	112	109	..	..	..
Total ..	3,180	2,298	39,553	2,30,145	20,90	45,366	2,44,388

*Reports received up to March, 1965,3 states.

@Reports received up to May, 1965, 2 states.

@@Reports received up to April, 1965, 1 state and 1 Union Territory.

2.50. Of the societies organised in pilot areas, 80 per cent are co-operative joint farming societies organised by traditional cultivators. In non-pilot areas, 60 per cent of the societies are joint farming societies. The remaining societies, both in pilot and non-pilot areas, have largely been formed on government waste lands, or on other lands that have been assigned to the societies.

2.51. As will be seen from the table given above, there have been wide variations in the progress of organisation in the different states. In Uttar Pradesh, Mysore and Punjab the pilot societies organised have exceeded the programme decided upon for the Third Plan. In Kerala, Madhya Pradesh and Maharashtra progress in the organisation of such societies has also been satisfactory. On the other hand, in certain other states like Andhra Pradesh, Bihar, Gujarat and Jammu & Kashmir, about 25 per cent or less of the pilot societies proposed have been formed. The reasons for these variations should be viewed in relation to the special problems which have been faced. Some of these are given below:

(i) Cooperative farming has yet to receive the priority that it requires and in the attention of most state governments. For instance, after the decisions regarding the overall programme in the Third Plan were taken, Andhra Pradesh government did not begin implementation till late in 1962, *i.e.*, it took over a year and a half to accept the broad guiding principles enunciated for this programme. After one year, the State Government decided to postpone further organisation of societies and to review the progress. After a pause of some months the organisation of societies was once again taken up.

(ii) In Madras, the State Government decided, in 1964-65, that it would be better not to organise any new joint and collective farming societies till the working of existing societies had been re-examined and action taken to consolidate and revitalize them. This was in spite of the fact that a detailed review was made by a committee set up by the State Government less than two years earlier. It may be mentioned, in this connection, that Madras Government did not accept the pattern of organisation suggested for pilot projects. Recently, in June, 1965, the State Cooperative Farming Advisory Board has suggested that whilst there should be no targets for the organisation of joint or collective farming societies, there should be no objection to organising joint farming societies where small cultivators come forward voluntarily. The recommendation of the Advisory Board is under consideration of the State Govt.

(iii) Some states made drastic cuts in the programme following the declaration of the National Emergency.

(iv) In certain states, existing rules regarding agricultural income tax and the levy of audit fee acted as positive disincentives to the programme. For instance, in West Bengal agricultural income tax was assessed on cooperative farming societies at the highest rate provided in the Act. It was only after four years of the programme that this imposition was recently removed. In Punjab, cooperative farming societies are still being charged an audit fee at a rate that is proving a crippling burden to them. This is in spite of the fact that the Working Group on Cooperative Farming recommended a change in this practice. Similarly, in Uttar Pradesh, an audit fee is charged on the value of the total capital assets of a cooperative farming society.

(v) Considerable delay sometimes occurred in the registration of societies and the allotment of lands. The lack of coordination between different departments was felt in most states. For instance, in one, difficulties arose regarding the claims of cooperative farming societies during consolidation proceedings. In the same State, the canal and cane departments did not recognise cooperative farming societies as single cultivating units. As a result, schedules for water distribution and facilities from the cane department are biased in favour of individuals. In another state, cooperative farming societies have been denied electricity connections, even when individuals, in the same area, have received such connections (even though they applied later).

(vi) In certain areas, efforts to obtain technical guidance from the block staff have also been rendered difficult, where the panchayat samiti or zila parishad was dominated by a political party or group that did not support cooperative farming. It may be mentioned, in this connection, that 15 out of the 18 zila parishads of Gujarat declined, in 1964-65, to accept pilot projects in their respective areas. In another state, it was found that funds for cooperative farming societies (were being routed through panchayat samitis), were sometimes not being advanced to societies owing to local politics.

(vii) The future of cooperative farming is closely linked with the implementation of the land reforms programme.

2.52. Apart from these special problems, the programme faced difficulties in matters relating to organisation, operation and management. Whilst these are being considered in detail later in this report, it may be mentioned here that the Ministry of Community Development and Cooperation, in January, 1964, drew the attention of the State Governments to some of the trends noticed in the programme. On the one hand, where care had been taken in the organisation and subsequent follow-up of societies, results had been demonstrably good. Where, however, the societies had been formed without careful preparatory work, examination of their composition and a study of their economic viability, a number of negative features had been observed. Some of these were:

(i) The majority of members were absentee and non-working members, whereas policy provided that they should not exceed ¼th of the total membership. In such cases, farm work was often carried out by engaging a large number of labourers, who were no more than paid employees.

(ii) Persons belonging to the same family had organised societies. They had admitted outsiders to membership merely to fulfil the minimum requirements of registration. Such members, who are generally landless labourers, continued to be exploited by the dominant family or group of the society.

(iii) In some cases there was lack of homogeneity, social cohesion and a sense of mutual obligation among the members. There was wide disparity between the members, some of whom were big landholders and, others, virtually landless. In certain instances, it was observed that the big landholders used the society as an agency for disposal of their unwanted assets, *e.g.*, cattle, tractors, pumping-sets etc. Such "patronage" societies cannot be termed genuine as they perpetuate the old landlord-labour relationship under the name of a cooperative.

(iv) Societies had been organised with a view to avoiding legislation regarding land ceilings, other land reforms or in order to secure government lands.

(v) Societies below the minimum size prescribed by the state governments had been registered and assisted, even though they could not function as viable units. In some cases, the lands pooled were so scattered as to make it impossible to reap the benefits of joint farming.

(vi) Individual members had pooled only a part of the land owned by them in the area of operation of a society. In some cases, the better plots of land were retained for individual cultivation.

(vii) The lands of the society were being cultivated individually even though a cooperative farming society had been registered. In some cases, there had been considerable delay in starting joint operations.

(viii) Adequate care was not being given to ensure incentives in remuneration to good workers. As a result, standards of work performance declined to the lowest common dominator.

(ix) Absence of adequate and timely financial and technical assistance from governmental and cooperative institutions also led, in some cases, to the disintegration of societies.

2.53. In view of such trends, the Ministry emphasized the need to pay the utmost attention to the qualitative aspects of the programme. It strongly advised that, under no circumstances, should societies be formed merely to fulfil targets.

2.54. *Cooperative Farming on Government lands*—The policy of Government of India in regard to the allotment of waste lands has been clearly defined in October, 1961, in a letter issued by the Ministry of Food and Agriculture. The following suggestions were made:

(a) Compact blocks of land belonging to government, located by the Uppal Committee, should be settled with cooperative farming societies. The minimum number of members and the area to be allotted to each society may be decided in the light of local conditions.

(b) In other areas, where blocks of land available for cultivation are likely to prove viable units, they may be allotted to a cooperative farming society for joint cultivation.

(c) Surplus lands obtained as a result of application of ceilings on holdings should also be settled with cooperative farming societies as far as possible.

(d) Where the available land in a village is small in area, organisation of cooperative farming societies need not be insisted upon. Efforts should, however, be made to persuade the allottees to join a service cooperative where it exists;

(e) Land should be allotted to the cooperative farming societies unreclaimed, except where state reclamation is necessary. When unreclaimed lands are allotted, the societies may be provided necessary finance for reclamation.

(f) Necessary financial assistance may also be given for other purposes from the various schemes.

(g) To enable cooperative farming societies to affect permanent improvements, security of tenure or occupancy rights in the land should be conferred. A restricted right of alienation in regard to loans obtained from the central cooperative banks, land mortgage banks and government, should also be given.

2.55. Response to this policy letter has varied from state to state. There are now 797 societies organised on waste lands. Of these, 376 are in Maharashtra, 104 in Madhya Pradesh, 97 in Mysore and 53 in Gujarat. In the case of the states mentioned above, vigorous action has been taken to encourage cooperative farming on such lands. For instance, in Gujarat, the revenue department has indicated, in detail, the location of waste lands to the cooperative department. These lands are surveyed by the deputy registrars concerned along with the district agricultural officers. A time-limit is given for the organisation of co-operative farming societies on such lands, only if societies are not formed, are these lands allotted to landless labourers on an individual basis.

2.56. Similar coordination, however, does not exist in many other states between the departments concerned. Thus, in spite of central policy, one state government framed proposals for the rehabilitation of landless labourers on an individual basis. It was only when Government of India requested the State Government to reconsider its proposals, that a scheme was formulated for rehabilitation of landless labourers on cooperative farming lines. In other states too, the absence of a common approach between the various departments has made difficult the formation of societies on government waste lands.

2.57. The subject has been considered frequently in Conferences of State Ministers incharge of the programme. In spite of this, such difficulties continue. It may be mentioned, however, that the Ministry of Food & Agriculture has specifically requested the State Governments to associate the State Cooperative Departments at the time of preparing proposals for the allotment of Government waste lands.

2.58. On the recommendation of the National Cooperative Farming Advisory Board, a sub-committee was appointed to go into the possibilities of organising cooperative farming societies on lands that were reclaimed as a result of the Rajasthan canal. The sub-committee studied the problem and formulated a scheme which is still under consideration of the Government of India and the State Government. Similarly, a scheme was formulated for cooperative farming in the delta lands of Andhra Pradesh. The State Government has drawn up a programme for implementation.

2.59. Efforts have been made over the past few years to introduce cooperative farming in Dandakaranya. It was experienced that the allotment of land to displaced persons on an individual basis was not yielding the desired results. Not only were the lands not being fully cultivated but, in addition, productivity was low and individual allottees rapidly sank into debt.

2.60. Accordingly, a scheme was formulated for cooperative farming in a selected zone of Dandakaranya, and budget provision made. However, work in the field has not begun.

2.61. *Some salient features of a cooperative farming society according to the present programme*—In order to facilitate an understanding of the present programme, the salient characteristics of a cooperative farming society are being given in the following paragraphs:

As have been mentioned earlier, cooperative farming necessarily involves the pooling of land and its joint management. Better and tenant farming societies, in which the members conduct their own operations and bear the risk individually, are regarded as highly developed forms of service cooperatives. In a cooperative farming society land can be pooled in two ways:

(i) the ownership may be retained by the individuals; or

(ii) the ownership may belong or be transferred to the society. The societies of the first category are known as 'joint farming societies'. Those in the second category are called 'collective farming societies'.

2.62. *Joint Farming*—A person who becomes a member of a joint farming society retains his ownership of land. His title remains unaffected by joint cultivation. The period of pooling of land is decided by the members at the time of registration. Normally, the land should be pooled for a period of atleast five years, so that a society has a chance to work through good, bad as well as indifferent years and the scheme can receive a fair trial.

2.63. At the time of withdrawal, a member may get back his piece of land. In case, however, the land of the outgoing member cannot be returned without breaking up the farm, another piece of land of equivalent productivity may be given to him on the periphery of the farm. Cash compensation may also be given in lieu of land, if agreed to. The policy should be such as would not cause hardship to the outgoing member, on the one hand, or dislocate the work of the society, on the other. A definite procedure for pooling and withdrawal of land should be laid down by the society at its inception.

2.64. A member is entitled to receive a return for ownership of the land pooled by him according to its fertility, location and productive capacity. There are two main methods by which the payment of the return for ownership may be made. Firstly, it can be paid out of the gross produce. If this system is adopted, the return should not exceed the limit of rent prescribed in the tenancy law. Secondly, the return can be paid out of net farm business income, which is arrived at after meeting various expenses from the gross income.

2.65. A part of the net profits is utilised for payment of bonus to members after providing for reserves. A substantial proportion of this should be paid on the basis of the work done by them. Incentives should also be provided for good work and higher remuneration paid for skilled work. A small proportion can also be utilised for granting bonus on the basis of return for ownership of land. The policy regarding the distribution of bonus for work and ownership is to be decided by the general body. The percentage of net profits to be used for creating various funds is laid down in the bye-laws.

2.66. *Collective Farming*—In a collective farming society, the members voluntarily agree to vest their right in the land with the society. At the time of the transfer of ownership rights, the lands are valued and shares are allotted to members individually in lieu thereof. Dividend on shares is paid out of net profits. In such a farming society, no return is paid in respect of ownership of land. Joint cultivation is a common feature of joint and collective farming societies. There is no other difference between these two forms of cooperative farming societies in so far as organisation, management and daily operations are concerned.

2.67. Collective farming societies are usually organised on Government lands, waste lands or newly reclaimed lands, where allotment is made in favour of the society itself.

2.68. As in a joint farming society, the affairs of a collective farming society are managed by the members in a democratic manner without state control.

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PART II

SUMMARY OF THE RESULTS OF INVESTIGATIONS

CHAPTER III

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, POONA, FOR THE STATES OF MAHARASHTRA AND MYSORE

The Gokhale Institute of Politics & Economics, (agro-economic research unit), made a study of the programme in the States of Maharashtra and Mysore.

MAHARASHTRA

3.2. In Maharashtra State, 3 pilot projects, *viz.*, Dhulia and Sindkhed (Dhulia district) and Arvi (Wardha district) were studied. Out of the 54 joint farming societies and 29 collective farming societies in Dhulia district, 35 joint and 17 collective farms had been in existence for over one agricultural year at the time of the survey. Of these, 10 societies were in the two pilot projects and the remaining 42 societies were non-pilot societies. For the survey in Dhulia district, 26 joint and 5 collective farms were selected; 6 joint farming societies and 7 collective farming society were case studied, whereas schedules were canvessed for the remaining societies.

At the end of the year 1963, there were 13 joint and 2 collective farming societies in Wardha district, of which 10 joint farming societies were formed in the pilot project. Of these 10 pilot societies, 3 were selected for case study and schedules were canvassed for the remaining societies. One old society, working for 4 years, was also case studied.

3.3. *Typology of Societies*—Taking into consideration the composition of societies, the number of households joining them, the economic status of members and the extent of land and other resources pooled, the societies studied may be classified, broadly, into five types:

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Particulars	Societies case studied		Societies for which schedules canvassed		Total
	Dhulia	Wardha	Dhulia	Wardha	
I. Societies consisting of members belonging to a number of families and staying in different households					
(*a*) With little difference amongst members in the size of holdings pooled, economic status, habits of work etc. (Gangakhed, Maharajpet—Wardha district) ..	..	2	1	4	7
(*b*) With wide differences amongst members in the size of holdings pooled, economic status, habits of work etc. (Samantnagar, Bharatpur–Dhulia district Ratnapur and Lahangaon—Wardha District)	2	2	15	3	22

Particulars	Societies case studied		Socities for which schedules canvassed		Total
	Dhulia	Wardha	Dhulia	Wardha	
II. Societies consisting of members belonging to two or three families, but staying in different households (Vijaygopal and Rampur—Dhulia district)	2	..	1	..	3
III. Societies consisting of members belonging to one family, but staying in different households (Ranwadi and Ekhumbha in Dhulia district)	2	..	1	..	3
IV. Societies consisting of members belonging to one family and staying in one household	..	..	2	..	2
V. Collective farming societies organised on Government lands, ownership of lands vesting with the societies (Dongardara—Dhulia district)	1	..	4	..	5
TOTAL ..	7	4	24	7	42

(i) In the societies of Type I, members belonged to different families and were drawn from a number of households. The majority of societies studied in Dhulia, and all those studied in Wardha, belonged to this type. Two sub-types were observed in this category. In the sub-type (a), there was little difference in the size of holdings of members and their economic status, even though they belonged to different families. Ganga Khed and Maharajpet societies (Wardha) are examples of this group. There were, in addition, four other such societies in Wardha, and 1 in Dhulia, for which schedules were canvassed. All these societies consisted of small farmers. In sub-type (b), there were wide differences in the size of holdings pooled by the members, their economic status and habits of work. 17/31 societies studied in Dhulia, and 5/11 in Wardha, belonged to this group. They included 4 societies that were case studied, *viz.*, Samantnagar and Bharatpur (Dhulia), Ratnapur & Lahangaon (Wardha) and 18 societies for which schedules were canvassed.

(ii) In the societies of type II, members belonged only to 2 or 3 families, though they stayed in different households and cultivated lands individually before the societies were formed. The families were generally interrelated, though the degree of relationship varied from society to society. Amongst those that were case studied. Vijaygopal and Rampur (Dhulia) belonged to this type. In addition, there was 1 other such society, for which schedules were canvassed.

(iii) In the societies of type III, through members originally belonged to one joint family, they now stayed in different households. Amongst the societies case studied, in Ekumbhe, members stayed in 7 households, whilst in Ranwadi, they stayed in 4 households. with the possibility of separating into 7 households. In another society of this type in Dhulia, for which schedules were canvassed, members stayed in 3 households. In each of these societies, membership was restricted to those belonging to the original joint family. As such there was little difference in the size of the holdings, economic status and habits of work of the members. Their lands, which had become sub-divided and fragmented, lay close together and formed a compact area after pooling.

Under the new Maharashtra Cooperative Societies Act, 1961, the registration of a society, consisting of members of the same family is prohibited. A family is defined to include the wife, husband, father, mother, grandfather, grandmother, step-father, son, daughter, step-son, step-daughter, grandson, grand-daughter, brother, sister, half-brother, half-sister and the wife of a brother and a half-brother. The new law poses the question as to what consideration should be given to the concept of a household, or an independent cultivating unit, in the registration of a joint farming society.

(iv) In each of the societies of type IV, only one family, staying in a single household, had organised the society. Two such societies, for which schedules were canvassed, were formed in Dhulia. There was no real pooling of land or other resources, as these already belonged to a single unit. It was possible to register such societies under the old cooperative law, as only the number of individual members, irrespective of the number of families, was taken into consideration.

(v) The collective farming societies of type V were set up on Government waste lands with landless labourers as members. In Dongardara Society, (Dhulia), which was case-studied, 3/4ths of the members were drawn from the backward classes. In the 4 other societies of this type, for which schedules were canvassed, membership was similar.

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3.4. *Membership: Motivation & Identification with Society*—The characteristics of the various types of societies may now be considered. The data provided in the case studies relating to the motivation of members, and their degree of identification with the societies formed, are indicated below:

In the societies of type I, those of group (a), formed in Wardha, owed their origin to the efforts of Sant Tukadoji Maharaj, who propagated the idea of cooperative farming and was widely revered in the area. His followers provided the leadership both in Gangakhed and in Maharajpet. In the Dhulia societies of Type I, group (b), Samantnagar was organised by a leader of the district, with the help of small farmers. Though the organiser was unable to devote his personal attention to the farm owing to political work, he had a genuine desire to organise a successful joint farming society. In Bharatpur, leadership was provided by a pleader, who, with the help of his brothers and certain other absentee cultivators, formed a society. Despite the withdrawal of some members, the pleader was keen to continue the existence of the society. He, therefore, enrolled other absentees and non-working members. Of the two societies of this group in Wardha, Lahangaon was organised by one of the bigger farmers on the advice of Sant Tukadoji Maharaj. He enrolled the other members from 6 different families. The other society, Ratnapur, was organised by a rich village leader who was impressed by the Nagpur Congress Resolution. In each of the societies of group (b), there was partial pooling of land and the members were of unequal status.

Amongst the societies of Type II, in Vijaygopal, the initiative was provided by a teacher, who wished to organise a society with his brothers and cousins, as they had been reduced to poverty owing to excessive fragmentation and sub-division of holdings, in Rampur, on the other hand, the initiative was provided by the pleader who organised Bharatpur society. He advised one of the factions in the village to desist from litigation and, instead, to improve its lot through co-operative farming. The leader of this faction accepted this advice, and formed a society along with members from 2 other family groups, some of whom were indebted to him. The members insisted on the pleader joining their society as its Chairman, in order to benefit from his advice and personality.

The two societies of Type III, Ranwadi and Ekhumba were both in Dhulia. The organisers of Ekhumba, wanted to bring their ancestral lands under a single management. They therefore restricted the membership to households owning this land. The members of this society belonged to one joint family, that stayed together and cultivated its lands jointly till 1939. Thereafter, the lands had been divided and, as a result, some of the brothers had become indebted and unable to develop their lands. The society aimed at correcting this situation by reviving joint management. In Ranwadi, conditions were similar. The society was organised at the initiative of a pleader, who had donated his holding of 40 acres in Bhoodan. He advised four brothers who were his clients to manage their lands jointly, as had been done 20 years earlier in the joint family. The idea, once again, was to develop ancestral lands that had deteriorated as a result of sub-division and indebtedness.

None of the societies of Type IV were case-studied, though two such societies existed in Dhulia.

The collective farming society, Dongardara, (Type V), was organised chiefly by members of the backward classes who were landless labourers. Government waste lands, which were allotted to the individual members in 1951, could not be cultivated individually for over nine years. The landless members joined together in order to develop these lands.

3.5. To sum up, the study of motivation indicates that the reasons leading members to join the societies were diverse, just as the problems confronting them varied. There were, however, a number of members who were drawn genuinely to cooperative farming as a technique most suitable for the optimum use of their available resources. Even in the societies of types II & III, i.e. those organised around a few families or a single divided joint family, members were similarly motivated. They saw in joint farming a method of preventing deterioration in their condition, by turning once again to the joint management of their land.

3.6. Only in a few cases did absentee cultivators utilize the opportunity of pooling their lands with a view to protecting them against tenancy legislation. In Bharatpur society, which consisted predominantly of absentee cultivators and lessors of land, one member had pooled a tract of irrigated land which he held in excess of the limit prescribed under the Ceilings Act. The report indicates that, generally, the bigger farmers of Dhulia did not join cooperative farming societies.

In 19/26 joint farming societies studied in Dhulia, members had pooled their entire land holdings. Only in 3/26 such societies had more than 25% of the members partially pooled their holdings. In the remaining 4 farming societies studied in Dhulia, only one or two members, in each society, retained small parts of their holdings for individual cultivation. The members of societies in Wardha, were frequently compelled to pool only a part of their holdings, as their lands were scattered in more than one village. For this reason, some of them had even accepted membership in two societies. The reasons for partial pooling of land were: (a) lands were located in more than one village and sometimes pooled in more than one society. Thus, the members of Maharajpet, Ratnapur & Lahangaon societies of Wardha district held land in more than one village, and some members of Maharajpet had joined two societies. (b) Lands were isolated and hence not accepted by the society (Bharatpur, Dhulia), (c) Inferior and uncultivated lands were sometimes not accepted by the society (Maharajpet, Wardha), (d) Only a part was pooled in order to save it from ceilings legislation (Bharatpur, Dhulia), (e) Irrigated and superior lands were not pooled (Samantnagar—Dhulia, Ratnapur, Lahangaon—Wardha).

As may be seen from this, in certain societies there was partial pooling for more reasons than one. In two societies, 20% of the land owned by members was retained for individual cultivation, in another two societies, 50 to 56 per cent of such land was retained, and in one society, 60% of the land owned was not pooled.

3.7. In 12/26 joint farming societies of Dhulia, only land-contributing persons were enrolled as members. In another 10 of them, a few landless persons were admitted. In the remaining 4 societies, landless persons were added to secure the minimum number of members required for registration. As there is no restriction on the number of landless members who can be enrolled in this manner, the possibility exists of societies being formed for the benefit of a single cultivator, though a large number of landless labourers, having nominal membership, may also be enrolled.

In Wardha, absentee cultivators were not enrolled in any sizeable number except in one old society. Inclusion of a few landless members, in spite of the small size of the holdings was, however a feature of most of the societies. Thus, in 9/11 societies covered by the survey in Wardha, 1 to 3 landless persons were enrolled as members. In the case of 3 of these societies, it is indicated that the landless were admitted to satisfy the requirements of registration.

3.8. *Economies of Scale*—(a) Bullocks and Implements: With the pooling of lands, certain distinct economies were observed in most of the societies of Dhulia. According to the report, there was a saving in the number of bullocks in practically every farm. This was particularly so in those joint farming societies of Dhulia, in which the entire land and other resources of members were pooled. The optimum use of bullock power led to reduction in the expenditure on the maintenance of bullocks, saving of fodder etc. Comparative data regarding the utilisation of bullock power, before and after formation of the joint farming societies case studied in Dhulia, is indicated in the following table:

S. No.	Type of society	Name of society	Bullock-power used before the formation of the society			Bullock-power used after the formation of the society		
			No. of bullocks	Total area cultivated (in acres)	Average area per pair (in acres)	No. of bullocks	Total area cultivated (in acres)	Average area per pair (in acres)
1	2	3	4	5	6	7	8	9
1	I(*b*)	Samantnagar	8	67	16·3	16	169	20·8
2	I(*b*)	Bharatpur	7	125	35·7	7	125	35·7
3	II	Vijaygopal	10	65	13	10	110	22
4	II	Rampur	12	86	14·3	12	116	19·3
5	III	Ranwadi	19	220	23·0	19	220	23·0
6	III	Ekumbhe	30	283	19	23	283	24·5

As may be seen from this table, in Samantnagar society (Type I b), the 8 bullocks pooled into the society formerly cultivated 67 acres. After the addition of 8 more bullocks, the society cultivated 169 acres. In Rampur society (type II), the same 12 bullocks cultivated 116 acres after formation of the society, compared with 86 acres before the pooling of land. In Vijaygopal society (Type III), the bullocks pooled into the society cultivated formerly an area of only 65 acres. After pooling, they were adequate for a farm of 110 acres. In Ekumbha society, the members owned 30 bullocks prior to the organisation of the society. After its organisation, they sold 7 bullocks, yet it was possible to intensively cultivate the entire area of 283 acres. Only in Ranwadi and Bharatpur societies was there no change in the position. In the former, the area cultivated per pair of bullocks was already quite high; in the latter, the society used a tractor in addition to the bullocks which were pooled.

In the societies of Wardha district, such economies of scale were not observed, as the members only partially pooled their land and other resources.

3.9. In Dhulia there was also a reduction in the number of implements required for the farm after the pooling of lands. Neither the societies nor the members attached much importance to traditional implements, many of which were pooled free of cost. The societies had, however, to purchase improved implements, as, with the change in scale, there was also need to change the methods of farming. Thus, deep tilling was done, and mechanized practices, in varying degrees, were adopted for irrigation, winnowing etc. Because of the pooling of land, however, it was possible to economise on the number of improved implements purchased. Many more would have been required had these new practices been followed on the individual farms. Thus, only two iron ploughs were used in one society to plough the holding pooled by the members. Similarly, one oil engine was used, on a number of wells, by rotation.

3.10. (b) *Consolidation of holdings*—Except in the case of societies organised around single families, the holdings of societies generally consisted of 3 to 8 blocks. Economies of scale, however, were determined less by the number of blocks than by their comparative size and the distance between different blocks. Where the blocks were big and located in one part of the village, it was possible for the labour to move quickly from one block to the other, without loss of time. On the other hand, where the blocks were scattered in different parts of the village, it was difficult to achieve economy in the use of labour. Many of the societies, therefore, whilst selecting members, sought to ensure that the number of blocks pooled were compactly situated. At times, this resulted in partial pooling; and, in certain cases, in the loss of working members to the societies. Thus, in Bharatpur society, parts of the land belonging to two members were not accepted, as the plots were situated at a distance from the major portion of the land pooled. As a result, it was not possible for these members to devote time to the lands pooled in the society, they also having to manage their unpooled holdings. In another society of Dhulia, whilst the holding of the society was in a single block, the majority of members pooled only a part of their land. In Wardha, too, some members could pool only a portion of their holdings as their plots were small in size and isolated from the major portion pooled in the society. The boundaries of individual farms were generally retained both in Dhulia and Wardha. As a result, all the agricultural operations were performed separately for individual fields. Where there were no bunds between the plots of different members, it was possible to perform the operations in continuity. There was, however, very little saving in the cost over labour on this account; the organisers themselves estimated the saving at only 1%—2%.

3.11. In the areas of Dhulia where consolidation of holdings had taken place, it was possible for the societies to get the lands pooled by members consolidated into compact units. The Consolidation Department, however, took into account the individual owner of a plot and not his household or the management unit. Consequently, even where consolidated operations had taken place, the farming societies could not always derive full benefit. In Wardha, the lands of the societies were generally scattered, as consolidation operations had not started.

3.12 *Agricultural Production*—According to the report, almost all the joint farming societies of Dhulia made attempts to increase agricultural production through increasing irrigation, the use of improved and intensive methods of cultivation and land development measures. In most of the farms, because of the extension of irrigation, there was an increase in gross cropped area. In Wardha, whilst the old societies generally adopted traditional methods of cultivation, the new societies were enthusiastic about agricultural development and better practices. Their activities, however, were restricted owing to the inadequacy of finance and certain other factors.

3.13. The results achieved by the societies in regard to production are discussed below:

(i) *Increased Irrigation*—9 of the 26 joint farming societies in Dhulia had dug new wells. 10 societies had deepened 14 old wells; 2 societies equipped their farms with pipe-lines to carry water from low-lying areas to highlying areas. As many as 23 societies purchased 49 oil engines to irrigate their farms. There was an increase in irrigated area in most of the farms. Only in 6 societies was it not possible to increase irrigation facilities. This was either because of scarcity in sub-soil water, or because the water available was not suitable for irrigation.

3.14. The increase in irrigation potential amongst the societies case studied, is indicated in the table given below:

S. No.	Type of society	Name o the society	Irrigated Area		Net increase	No. of wells constructed and repaired by the society (in acres)
			Before the formation of the society (in acres)	After the formation of the society (in acres)		
1	2	3	4	5	6	7
			(Dhulia District)			
1	II	Vijaygopal ..	17	29	12	1 new well—2 old wells deepened.
2	III	Ekumbhe ..	50	62	12	1 well deepened and pipeline constructed.
3	I(*b*)	Samantnagar ..	10	27	17	1 new well—repairs of 1 old well.
4	II	Rampur	35	50	15	2 wells repaired.
5	III	Ranwadi ..	..	29	29	2 wells sunk.
6	I(*b*)	Bharatpur ..	104	104	Nil	Nil
7	V	Dongardhara (Collective farm) ..	..	..	..	1 well under construction; Bandhara across the stream for srorage of water for household purposes.
			(Wardha District)			
8	I(*a*)	Gangakhed ..	3·00	3·00 1st yr. 1·25 2nd yr. (area reduced for want of funds)		1 new well and repair of old well.
9	I(*b*)	Lahangaon ..	..	2	..	1 well constructed.
10	I(*a*)	Ratnapur ..	..	0·50	..	..
11	I(*a*)	Maharajpet ..	Nil	Nil	..	..

3.15. As may be seen from this, the net increase in irrigated area was high in the societies of Types II & III and in one society of Type I(b). In the other societies, too, efforts were made to increase irrigation potential wherever scope existed. In Vijaygopal society, (Type II), where small farmers had pooled their lands, it was possible to irrigate plots pooled by 5 members by sinking a new well in one of the plots. In Ekhumba society, (Type III), it was once again possible to use an old well for irrigating the plots pooled by 5 brothers, this had not been done since the households separated many years earlier. The case-studies indicate that the new wells were being located in such a manner that they irrigated the largest area possible of the lands pooled. As a result, wells were being more fully utilized and the benefits of scale obtained.

3.16. (ii) *Improved practices*—Comparative data regarding the use of manures and fertilisers on the lands pooled in the societies case studied, before and after the formation of the societies, is given in the following table.

S. No.	Society	Manures				Fertilizers			
		Before		After		Before		After	
		Value	Cost P/acre	Value	Cost P/acre	Value	Cost P/acre	Value	Cost P/acre
				Dhulia					
			Rs.		Rs.		Rs.		Rs.
1	Samantnagar I(*b*)	1,887	16	9,084	60	..	..	..	..
2	Vijayagopal II	1,442	13	5,968	54	284	1·9	1,022	9
3	Rampur II ..	2,150	20	4,569	40	988	9	3,886	33
4	Bharatpur I(*b*)	Not available		1,547	12	Not available		4,259	34
5	Ranwadi III ..	1,760	7	3,626	18	..	..	2,336	11
6	Ekumbhe III	5,570	19	15,661	55	395	1·4	382	1·3
7	Dongardara V	Not applicable collective farm.		325	4	..	..	..	..
				Wardha					
8	Gurudev I(*a*) ..	355	7	401	8	36	0·6	273	5·5
9	Maharajpeth I(*a*)	..	..	806	8	..	..	100	0·5
10	Ratnapur I(*b*)	Nil	Nil	537	2	..	..	550	2·8
11	Lahangaon I(*b*)	346	6	600	8	..	..	178	3

As may be seen from the table, in the societies of Types II & III, the inputs of manures and fertilisers were the heaviest. Samantnagar society of Type I(b), increased its manure inputs from Rs. 16 per acre to Rs. 60 per acre, as it started a dairy unit after organisation.

3.17. The societies case studied had adopted a variety of improved cultivation practices. Samantnagar society (Type I b) used improved seeds and adopted crop protection measures. Gangakhed society (Type I a) used improved seeds of cotton, jowar and groundnut, which it obtained from the agricultural department. Dibbling was undertaken in 6 acres. The chilly crop, which was carefully sown, drew considerable praise in the area. In Maharajpeth society (Type I a), Sann hemp was grown as a green manure on 2 acres, dibbling was introduced on 4 acres, cotton was sprayed with endrine and chilly was introduced on the irrigated land. The practice of dibbling, and the use of fertilisers, were tried for the first time in the village on the fields of the society.

In Lahangaon society (Type I b) use of fertilisers was stopped in the second year as the results were not encouraging. Instead, farm yard manure was used and goats were penned on a small area of the farm. In the second society of Type I (b) in Wardha, *i.e.*, Ratnapur, traditional methods of cultivation were adopted, as most of the members were leasing out their lands. In the second year, but for the use of improved cotton and jowar seeds, traditional methods were continued.

Vijaygopal society, (Type II), undertook intensive methods of cultivation, and grew crops like cambodia cotton and chilly. It used both night soil and the manure of goats, and adopted a variety of improved agricultural practices. Winter ploughing was also started, as bullocks were available. In Rampur society (Type II) improved agricultural practices were adopted on the entire land. The organiser of the society was a progressive farmer registered by the Agriculture Department. Double cropping of wheat, and the sowing of banana and chilly were introduced. The harvesting of groundnut was postponed to a period when the members had less work. In both the societies of this type, watch and ward of the crops became economic, as one or two servants could do the work. In one case, the gun belonging to a member was used for protecting the crop grown on all the lands of the society.

Ekumbha society (Type III) had a significant record. Cambodia cotton was introduced for the first time in the village and an area of 13 acres was sown with it. Chilly and wheat were grown on 19 acres, whereas 3 acres were devoted to onions and vegetables. Two hundred young 'mosambi' plants replaced the old ones. Dibbling was adopted for unirrigated cotton instead of drilling this method was introduced by the society for the first time in the village. Ranwadi society, (Type III), also cultivated cambodia cotton and chilly for the first time in the village. The individual cultivators of the area followed the example of the society, which also supplied sprayers and other implements on rent to non-members. In addition, the society introduced the use of fertilizers, on unirrigated lands for the first time in the village. It also supplied bajra seed to non-members.

3.18. *Dongardara society (Type V), adopted traditional practices* —The case studies indicate that improved practices were widely adopted by societies which were organised around progressive cultivators. This was particularly so in the societies of Types II & III. As Dhulia was subject to crop failures, it was the view of the organisers that societies using fertilizers on a large scale were likely to incur heavier losses than those which used them moderately. Samantnagar (Type I b) and Ranwadi (Type II) has suffered heavy losses in this manner in one year.

3.19. (iii) *Crop Finance*—The intensive use of inputs and improved practices in Dhulia district resulted largely from the volume of crop finance made available by the Central Cooperative Bank. In Wardha, however, in the absence of such finance, the societies could not make intensive efforts to increase agricultural production. Comparative data regarding crop finance made available by the cooperative banks to individual members before the societies were formed, and to the societies after their organisation, may be seen in the following table:

S. No.	Name of the Distt.	Name of society	Crop finance given by the Central Co-op. Bank (Rs.)		Finance per acre (Rs.)
			Before the organisation of the society	After the organisation of the society	
1	2	3	4	5	6
1	Dhulia	Samantnagar	N.A.	18,000	106 (increased to 146 in the third year).
2	,,	Vijayagopal	3,400 (Rs. 31 per acre)	15,500	141 (Rs. 137 in the 3rd year).
3	,,	Rampur	N.A.	15,000	130 (Rs. 154 in the 2nd year).
4	,,	Bharatpur	N.A.	30,000	240 (Rs. 280 in the 2nd year).
5	,,	Ranwadi	6,000 (Rs. 27 per acre)	15,850	72 (Rs. 102 in the 2nd year).
6	,,	Ekhumbhe	12,920 (Rs. 46 per acre)	42,500	150
7	,,	Dongardara	..	8,000	47 (60 in the 3rd year).
8	Wardha	Gangakhed	1,000 (Rs. 20 per acre)	2,100	42
9	,,	Maharajpeth	N.A.	1,200	13
10	,,	Ratnapur	..	Nil	
11	,,	Lahangaon	N.A.	3,190	41

3.20. (iv) *Land Development*—Apart from increasing the area under irrigation, 9 joint farming societies in Dhulia district made special efforts for the development of their land. The measures taken included the repairs of existing bunds, removal of weeds, deep ploughing etc. As the bunding programme had already been completed in most of the villages of Dhulia, the societies did not incur any expenditure on this account. On the other hand, societies in Wardha paid greater attention to bunding, as this had hitherto been neglected by the small farmers and Govt. had not yet initiated such a programme. 9/11 societies surveyed had spent money on land development. The position in the societies case-studied is indicated below.

Of the two societies in Wardha of Type I (a), Maharajpet undertook reclamation, deep ploughing and removal of shrubs at a cost of Rs. 2,500. The other society, Gangakhed, spent Rs. 1,000 on land development, and purchased 13 acres of waste land for Rs. 1,662. The other two societies in Wardha, belonging to Type I(b), undertook bunding. One society had spent Rs. 200 for this purpose. The other society bunded 16 acres, reclaimed 4 acres of waste land by manual labour, and 16 acres by tractor ploughing. Of the two societies of Type I(b) in Dhulia, Samantnagar reclaimed two acres and levelled and desilted 5 acres. The other society, Bharatpur, did not take up any land development activity.

Rampur society (Type II) levelled and deep ploughed its land. 40 acres were tractorised and a silopit was constructed. Dongardara society, (Type V), reclaimed 250 acres of land which had remained uncultivated for over 10 years. The total cost of reclamation was over Rs. 5,000.

3.21 (v) *Production*—As a result of the improved practices, increase in irrigation, and land development, the farm output after the organisation of societies, indicated increase in all the societies case studied in Dhulia. In some cases, the increase in output was remarkable. However, the report states, 'it was not possible to conclude on the extent of increase in production as the district was subject to wide fluctuations in seasonal conditions.' A general tendency was also observed, in the societies case studied, to devote a larger proportion of the area cultivated to cash crops.

In Samantnagar society (Type I) the gross value of production, which was Rs. 171 per acre prior to the organisation of the society, increased to Rs. 206 per acre in the first year, was Rs. 190 per acre in the second year, and Rs. 256 per acre in the 3rd year. In Bharatpur society (Type I) the data of production prior to the formation of the society was not available. The gross value of production per acre was Rs. 235 in the first year of the society and Rs. 283 per acre in the second year. Of the four societies in Type I in Wardha district, in Gangakhed, the gross value of production per acre showed a slight decline from Rs. 142 per acre to Rs. 135. In Maharajpet society of the same type the gross value of production per acre was Rs. 39 in the first year and the society had suffered a loss of Rs. 3,314. In Ratnapur society, the gross production per acre in the first year of the cooperative farm was Rs. 23; it was Rs. 77 per acre in the second year. The gross value of production showed a decline in the third and fourth years to Rs. 47 and Rs. 39 per acre respectively. In each year, the society incurred a loss. In Lahangaon society the gross value of production per acre was Rs. 121 per acre and after the organisation of the society, it was Rs. 100 per acre. The society suffered a loss of Rs. 3,100.

In Vijaygopal society (Type II) the gross value production per acre, which was Rs. 178 before the formation of the society (1959-60), increased to Rs. 264 per acre in the second year of the society. As the society was registered after the kharif season, the actual functioning of the society started in the second year. In the third year, the gross value of production per acre increased to Rs. 318. During this period, the gross value of production rose from Rs.19,557 in 1959-60, to Rs. 29,098 in 1960-61 and to Rs. 34,951 in 1961-62. In the second society of Type II, Rampur, the gross value of production increased from Rs. 172 per acre (Rs. 18,051) before organisation of the society to Rs. 174 per acre (Rs. 20,120) in the first year after its formation. In the second year, gross production per acre on the lands pooled showed a further rise to Rs. 213 per acre (Rs. 29,196).

In Ekumbhe society (Type III), the gross value of production per acre, which was Rs. 169 before formation of the society showed a significant increase to Rs. 257 per acre after formation. The gross value of production increased from Rs. 47,918 to Rs. 62,886. In Ranwadi society (Type III), the gross value of production per acre showed a decline from Rs. 82 per acre (before the formation of the society in 1960-61) to Rs. 59 per acre (after the formation of society in 1961-62) due to failure of crops. In the second year, however, the gross value of production per acre rose to Rs. 131 per acre.

In Dongardara Collective Farming Society, however, (Type V) the gross value of production per acre showed a decline from Rs. 99 in the first year to Rs. 72 per acre.

3.22. It will be observed from the above data that gross production and per acre production had increased in most of the societies of Dhulia. The increase was particularly substantial in the societies of Types II and III.

3.23. *Agro-industries*—Industries allied to agriculture and cottage and village industries were undertaken only by a few societies in both the districts. Of the 11 societies case studied, 6 had taken up various agro-industries. Samantnagar society, (Type I), had 11 buffaloes valued at Rs. 6,000. In the first six months after their arrival, the society earned a profit of Rs. 3,400. The society had also purchased 10 khilar cows for breeding purposes. Bharatpur society, (Type I), started a dairying unit with 16 buffaloes, investing a sum of Rs. 11,750. It had also applied for a loan of Rs. 15,000 for horticulture. The society had secured 33 sheep, free of cost, from the Animal Husbandry Department. Because of the lack of availability of personnel to rear the sheep, the flock was transferred to the neighbouring society, Rampur, which was sponsored by the organiser of Bharatpur society. Gangakhed society (Type I) was supplied 109 sheep, free of cost, from the Animal Husbandry Department. The society had also started a flour mill. In Rampur society (Type II) a dairy unit was started with 22 buffaloes. 15 khilar cows were also kept for cattle breeding purposes. The society also started a poultry unit with 127 birds. The birds, however, died and the enterprise faced a loss. Like Bharatpur and Gangakhed, this society was also supplied 33 sheep, free of cost, by the Animal Husbandry Department. In addition, it purchased 50 sheep at a cost of Rs. 2,000. As the two neighbouring societies, Bharatpur and Lakshmanpur, transferred the sheep given to them by the Animal Husbandry Department to this society, Rampur had a flock of 149 sheep. The Animal Husbandry Department had allotted one stockman to look after the sheep of the three societies. At the time of study, the sheep had multiplied to 160, but the price offered for them was Rs. 30 per sheep, which was lower than the purchase price of Rs. 40 Rampur society had also started a flour mill, which was running at a profit. The second society of Type II, Vijaygopal, had taken up rope making from sisal fibre. Ranwadi society of Type III had purchased 14 buffaloes and made an investment of Rs. 5,525 for this purpose. It had also invested a sum of Rs. 1,200 on poultry. Most of the birds, however, had died. Although the society had applied for sheep from the Animal Husbandry Department, it was refused to supply. The society had invested Rs. 600 in horticulture. It was proposing to start a flour mill, for which there was scope in the village.

3.24. The four societies that undertook dairying in Dhulia project, were supplying milk to the Dhulia Milk Union. The van of the Union collected the milk from the societies. The societies in the neighbouring project, Sindkhed, were also prepared to take up dairying, if the Milk Union could ensure the collection of milk from interior areas. Dairying had proved successful and had provided gainful employment to members. The flour mills started by the societies were also profitable.

3.25. *Employment and Remuneration for Work*—Of the 26 joint farming societies in Dhulia district, in 11 societies, 75% or more of the members worked on the farm. Most of the members, in societies organised around small farmers or a single family, worked on the farm. In the other societies, the proportion of working members to the total members was about 50%.

In Wardha district, as the size of the societies was small, it was not possible to employ all members, even when they were prepared to work. Such societies, therefore, freely encouraged the members to seek outside employment. Whilst, in 5 of the 11 societies, more than 66% of the members were employd on the farm, in the other societies, the proportion of working members was low, mainly because of partial pooling of land and the presence of absentee cultivators.

Of the societies case studied, in 4 societies of Type I, the percentage of working members to non-working members was less than 50. In one society, Bharatpur, (Type I), which consisted of absentees, non of the members worked on the farm; 2 members, however, engaged in supervision and management. Of the remaining 10 members, 6 were absentees, 3 were chiefly engaged in individual cultivation and 1 was in service. In contrast, the participation of members in farm work was substantial in societies of types II & III.

3.26. Even though the byelaws of the societies envisaged that at least 75% of the members should work on the society's farm, there was no precise definition of a 'working member'. Those who looked after management and supervision were included amongst the working members. The chairman of one society who worked only for one day in the year, and earned Rs. 2, was also counted as a 'working' member'. Study indicates, therefore, that the concept of a working member needs more precise definition.

3.27. Members were paid remuneration for farm work according to the local rates of the village. Only in one of the societies case studied remuneration paid was higher than the local rates. There was a small rise in the rates in four societies in Dhulia district during the last two years. In Vijayagopal society, (Type II), the rates for the members, and non-members working on annual contract (known as Saldars), increased by 8%. In Samantnagar, and Bharatpur, (Type I), and Ranwadi, (Type III), the rates went up by 5% to 7%.

3.28. According to the survey, there was a sizeable increase in employment in Dhulia district after the organisation of societies. This was chiefly because of the developmental measures undertaken and the intensive cultivation of crops. In the Wardha district, however, there seems to have been only a small increase in employment, as developmental activities were relatively few. Except in Bharatpur society (Type I) in all the other societies case studied, there was increase in employment. It was, however, not possible to determine the exact extent of increase in employment, because of the practice of leasing out land and the difficulties involved in evaluating self-employment on private farms.

3.29. The land development measures undertaken by the societies generated employment. In Rampur society, (Type II), the land development activities and the deepening of a well accounted for 18% and 7% respectively of the wage distribution in the first year. In the second year, there was no expenditure on this account. However, two additional farm servants had been employed for attending to the work of sheep and cattle breeding. 10% of the wage distribution in the second year went for this purpose. The intensive cultivation of crops increase in the area under banana, chilly etc. led to increase in the quantum of wages. In Vijayagopal society, (Type II), the cost of sinking a well and deepening two wells accounted for 22% of its wage distribution in the first year. In the second year the well sinking programme accounted for only 4% of the wages. In the third year the labour cost on well sinking was only 2 per cent. In Ranwadi society (Type III), sinking of a new well and deepening of old wells led to increase in employment. Similar measures were undertaken in all the other societies case studied in Dhulia district, except Bharatpur, (Type I) which comprised of absentee cultivators. The case studies illustrate that greater employment resulted from developmental activities in the first year, than in the second year. However, in the second year, employment was increased through intensive cultivation, which was possible because of the developmental measures initiated in the first year.

3.30. In most societies of Dhulia district, (including the societies case studied), members preferred to have employment assured on the basis of an annual contract, locally known as the 'Saldar' system. Each society in Dhulia district, depending on the size of the farm, appointed a number of such persons. According to the local yard-stick, one such person was required for 15—20 acres, depending on whether the land was irrigated or not. The normal village practice was to fix remuneration according to the capacity and skill of the worker. This method of linking payment to capacity was not appreciated by the members of some societies, which had to remunerate their working members uniformally. In societies consisting of absentees, and in these in which the number of working members was inadequate, non-members were engaged as farm servants on a large scale. Before the organisation of certain societies, some members were used to employing labourers to do the hard work on the farm. After the societies were formed, such members drew similar remuneration as the others, but their capacity to work was distinctly less. As a result, they upset the labour economy of their societies.

3.31. Certain other members, who were educated or belonged to the class of bigger cultivators, preferred to do light work, such as supervising casual labourers, irrigating the fields, marketing, tractor driving etc. Their 'white collared' attitude led to quarrels in the distribution of work and earned them the displeasure of these members who actually worked on the farm. To meet these difficulties, one society, *i.e.*, Ekumbe, (Type III), evolved a system of remuneration which was related to specific jobs. The rates prescribed were fixed after taking into account the ability and capacity for work of the members. In this society, while only three members participated in farm operations, seven others were engaged in supervisory work. The society decided that the latter should be remunerated on a smaller scale. The manual work was carried out by 15 farm servants, who were working earlier on the private farms. The area cultivated per farm servant was 19 acres, which was quite large, when compared to many other societies. In the allotment of work on the farm, specific provision for the employment of members' children was not made by the societies. Thus the association of children with work on the farm, which constituted an important factor in agricultural development, was neglected.

3.32. The share of members in the wage bill is indicative of the participation of members and the benefits accuring to them. Amongst the societies of Type I in Wardha district, in Gangakhed, 92% of the wages were earned by the members and their families as remuneration for work. In Maharajpet, the share of the members was 61%. In the third society, Lahangaon, the members' share was nearly 70 per cent. In the Ratnapur, which was an old society, organised by a big cultivator and absentee members, who partially pooled their lands, the members' share was 37% in 1959-60, 17% in 1960-61 and 3% in the years 1961-62 and 1962-63 respectively. This was because 9/12 members left the society and their membership was nominal. In Dhulia district, amongst the societies of Type I, in Samantnagar the members' share of wages showed an increase from 12% in 1960-61 to 23% in 1961-62 and to 28% in 1962-63. In Bharatpur society, also Type I, members earned remuneration for work to the extent of 4% of the total wages in 1961-62 and did not earn any in 1962-63. This was because all the members were absentees, and the farm was operated through paid labourers. In Vijayagopal and Rampur societies (Type II), in the first year, the members' share of remuneration for work was 80% and 68% respectively. In the second year their share declined to 70% and 46%. In Rampur, this was largly due to the appointment of a number of non-members as farm servants in order to undertake various developmental activities. InEkumbe society, (Type III), the members' share was 30%. This was due to the employment of 15 non-member farm servants. In Ranwadi society, (Type III), the share of the members increased from 17% in the first year to 30% in the second year.

In Dongardara society, (Type V) where the membership consisted of landless persons, the members accounted for 80% of the wages in the first year, 73% in the second year and 72% in the third year. This indicates that the employment of outside labourers was inevitable during the peak seasons, even where the majority of members participated in farm work.

3.33. To sum up in Dhulia district, in the societies case-studied of Types I (b) & III, the share of members in payments made for Farm work was low. This was because the members were frequently absentees and, in other cases, assuming only supervisory duties.

3.34. *Distribution of Profits*—6 of the joint farming societies in Dhulia district earned profits, amounting to Rs. 21,000, in the year 1962-63. The profits for the individual societies varied from Rs. 1,500 to Rs. 4,000. In the earlier year, 8 societies earned profits; 4 societies earned profits in both the years. The 2 societies organised by single families staying in a single household (Type IV) and 1/3 societies organised by a single family staying in different households (Type III) had shown profits continuously. All the 3 societies organised around two to three families (Type II) earned large profits in one of the two years. Each of these 3 societies were organised by small farmers. Another small farmers' society, consisting of members from different families had, however, incurred losses because of the inferior nature of its soils and because a large part of the Government assistance provided for investment was distributed to the members as consumption loan. The other societies, most of which were heterogenous in character, had incurred losses repeatedly. The loss per society varied from Rs. 200 to Rs. 11,000. The majority of these societies had, however, incurred losses below Rs. 2,000. It was said in the district, the members distributed a part of the produce among themselves, that in some societies, prior to weighing and final accounting, in order to show losses. The losses in many cases were only marginal.

Out of five societies of Wardha district which had completed one agricultural year, one old society earned a profit of Rs. 1,800. The others suffered losses varying from Rs. 200 to Rs. 3,000 in the year 1962-63.

It was observed that the significance of profits and capital formation was not adequately understood in the farms, the members being more interested in the increase of their current incomes.

3.35. 22 out of 26 joint farming societies in Dhulia had distributed return for land at a rate varying from 2 to 6% of the value of the land in the year 1962-63. In the remaining 4 societies, the non-working members could not get any returns. The income of working members varied from even a few rupees to Rs. 700 per member. In Wardha district, only 1 out of the 5 societies, which had completed one agricultural year, had distributed return for land at the rate of 6% of the value of the land. The others had given advances against the same.

Amongst the societies case-studied, the position was as follows— In Maharajpeth society (Type I) no land return was paid as the society had incurred a loss of Rs. 3,314. The society, however, gave advances against the return for land at 5% of the value of land. In Gangakhed society of the same type, advances were given against the return for land in the second year, when the society incurred a loss of Rs. 1,287. One member was given Rs. 50 when his father died; another Rs. 50, when his wife was ill; a third was given Rs. 75 when he was ill, in addition to an earlier loan of Rs. 130 for building a house in the village. In Ratnapur society (type I), no return for land was paid as losses were incurred in the first three years. In the fourth year, an advance of Rs. 1,761 was given against the land dividend. In Lahangaon society (Type I) no return for land was paid, as the society suffered a loss of Rs. 3,102. Even the land was not valued as no dividend was declared. In Bharatpur society of Dhulia district, (Type I), return for land at 6% of the land valuation (Rs. 5,684) was given in the first year, though the society had suffered a loss of Rs. 11,000. In the second year, also return for land was paid at the same rate though the society had incurred a loss of Rs. 4,383. In Samantnagar society (Type I), in the first year, a return for land of 9% was declared and paid, whereas the byelaws permitted land dividend of only 6% of the land valuation. During the year, the society had earned a profit of Rs. 6,682. In the second year, the society declared, return for land @ 6% but the return could not be paid to the members for want of funds. The society paid that return in the third year, even though it had suffered a loss of Rs. 3,905.

In Rampur society, (Type II), in the first year a land return of 6% of the land valuation (Rs. 4,519) was paid. The society had earned a profit of Rs. 1,688 in that year. In the second year the society paid return for land @ 4% in spite of a loss of Rs. 11,910. In Vijayagopal society (Type II) the society paid return for land @ 6% (Rs. 5,663) though the society had a loss of Rs. 2,562. In the second year, the society paid a land return of 6% of the land valuation and, in addition a bonus of 3% on the land dividend. The society also paid bonus to non-members, on the wages earned, at 1% and a dividend on share capital, at the same rate. During the year 1962-63, the society earned a profit of Rs. 3,072.

In Ranwadi society (type III), return for land at 4% of the land valuation was paid in the first year, when the society suffered a loss of Rs. 10,000. In the second year, a sum of Rs. 8,055 was paid at 6% as land return though the society had incurred a loss of Rs. 5,413. In addition, the society made an advance of Rs. 3,000 to three brothers to repay the crop loans and other debts against their land dividend which they would receive. The policy of distributing the profits of the dairy business, on the basis of the land contributed, created discontent and one of the members left the society and started his own dairy. In Ekhumbe society, (Type III) a land return of 4½% (Rs. 16,166) was paid, though the society incurred a loss of Rs. 5,603.

In Dongardara society, (Type V), in the first year, 40% of the profit, Rs. 2,984, was distributed as bonus to members on the basis of work. In the second year, a bonus of 25% of the wages earned, (Rs.1,996), was distributed; in the third year, there was a loss and no bonus was distributed. The society had built up reserves amounting to Rs. 4,206 in 3 years.

3.36. As may be seen from the data, the societies generally treated return for land as a part of the current farm expenditure and distributed it even when the societies incurred losses. In some cases, the lands were said to have been valued at a premium, and the members secured high returns for inferior lands. The tendency to distribute a bonus or land dividend, stemmed from the desire of the influential land owning members to get a higher return, even though they engaged only in supervisory functions. In such cases, the working members sometimes expressed their dissatisfaction.

3.37. Apart from monetary returns, certain societies adopted a system of providing non-monetary returns. Thus, some societies occasionally distributed green chillies and vegetables, milk etc., free of cost or at concessional rate, as the members would have enjoyed such privileges before pooling. One society, which had discontinued the system of growing 'dal' as a mixed crop, created discontentment amongst some members on this account. The societies allowed free use of carts, etc., to their members for visits to the market etc. In Wardha district, the facility was extended even to the bringing of members' guests from their villages and taking them back. In certain cases, this added to the prestige of the small farmers in their community, as they had earlier been unable to own a cart.

3.38. *Interse relations and impact of Societies on Villages*—The societies in Dhulia district had generally created a favourable impact on the villagers of the area. In some cases, the societies supplied their improved implements, sprayers and engines on rent. In other cases, the societies introduced new practices of cultivation which other farmers tried to emulate. However, rival groups in some villages created difficulties in the working of the societies. In Rampur village, though the society was running a flour mill, the villagers of the rival group took their grains for grinding to a distant village.

The societies in Wardha district had made less improvements, and, therefore, created a lesser impact. As the societies themselves lacked many requisites, they could not provide much assistance to the other villagers.

3.39. The big cultivators were, generally, not in favour of cooperative farming. This was mainly for two reasons: firstly, some of them were against the concept of cooperative farming itself; secondly, the societies which employed casual labour on a large scale, for long periods, stood in the way of their securing such labour for themselves. The study indicates that the casual labourers preferred to work on the farms of societies, rather than on the farms of the bigger cultivators, as they were provided continuous employment by the societies and were paid more promptly.

3.40. The inter society relations depended upon the groups organising the societies and the relationship amongst their leaders. The societies organised by a particular political group, generally tried to help the other societies organised by the same party. Some of the societies helped each other with fertilizers, fodder, cash loans etc. Whilst there was generally a degree of coordination and unity amongst the leaders, irrespective of party ties, in certain cases, rivalry existed, as between one society formed by workers of the Congress Party and the other formed by Communists.

On the whole, however, one of the most important features in Dhulia district, was that leaders worked unitedly for the programme. This was illustrated most clearly in the cooperation they extended to each other in the working of the District Federation. Efforts were also made to develop social ties amongst the members of the societies. Thus, marriages had been arranged amongst the family members of various societies.

In Wardha district, however, leadership in the Block was divided into two distinct groups. As a result, the villages too were divided. This effected the working of societies formed in Arvi project.

3.41. The attitudes, policies and procedures adopted by one society, influenced the working of others. In certain cases, wrong practices were transplanted more easily. Thus, the first society organised in one village misused the bank finance obtained for the purchase of buffaloes by starting a cloth shop. Six of the eight societies which were later formed, aimed at obtaining loans for individual members, with which they could clear their old debts. This practice was also reflected in a society of an adjoining village. In another village, as one society was organised by members of a single family staying, in one household, a similar society was organised in an adjacent village.

3.42. *Leadership Pattern*—A few workers of the Praja Socialist Party started organising cooperative farming societies in Dhulia in 1960. They organised the first 4 societies in this year. Thereafter, the workers of other political parties also entered the field when the pilot project scheme started, therefore, it was possible for the officials to secure the cooperation of both district and village leaders in the organisation of societies. Out of 4 societies organised in 1961, only 1 was organised by a Praja Socialist Party leader, the remaining 3 being formed by Congress workers. Out of the 29 societies organised in 1962, 8 were organised by workers of the Praja Socialist Party, 7 by workers of the Congress, 2 by members of the Republican party, 2 by Sarvodaya workers and 2 others by persons belonging to various political parties. In addition, 6 societies were formed by persons without party affiliation. In the development of cooperative farming, the non-officials received enthusiastic support from the officials in Dhulia. It was as a result of this close association, that a large number of societies were formed.

3.43. In addition, in Dhulia, other cooperative organisations played a vital role. Without the support of the Central Cooperative Bank, the District Marketing society and the purchase and sale Union, it would not have been possible for the societies to function properly or to pave the way for the organisation of new societies.

3.44. In Wardha district, the first joint farming societies were organised in the wake of the Nagpur Congress Resolution of 1959. The experiments proved a failure, even though three societies nominally existed at the time of survey.

After the introduction of the pilot project programme, initiative in the organisation of societies was taken by the followers of Sant Tukodoji Maharaj, in whom the farmers of the area had confidence. Unlike Dhulia, however, the district leadership of Wardha, both political and cooperative, was not behind the programme.

3.45. *Financial Assistance*—The societies in Dhulia and Wardha districts received assistance from the Cooperative Department according to the existing pattern. Whilst, in Dhulia, this assistance from government proved initially adequate, because of the additional funds provided by the Central Cooperative Bank, in Wardha, the Government assistance fell far short of the requirements of the societies, as assistance from the Bank was inadequate.

3.46. In Dhulia, the Central Cooperative Bank provided medium term loans for digging of new wells, purchase of oil engines, tractors, bullocks, cows and buffaloes, and the construction of godowns. Largely because of this, the societies could formulate appropriate schemes of development. In the year 1962-63, the Bank advanced medium term loans amounting to Rs. 1.35 lakhs, and a crop loan of Rs. 4.69 lakhs, to 26 societies. The average medium term loan per society worked out of Rs. 5,200 and the crop loan to Rs. 18,000 per society. The latter varied from Rs. 8,000 to Rs. 42,000 per society, according to the size of the holding, the production plan etc. The recovery of the bank loan was satisfactory, and only 12 per cent of the loans were overdue at the end of 1962-63. The District Federation used its influence and brought pressure to bear on the societies that were slow to repay the loans obtained from the Central Cooperative Bank. It called for the explanations of the Chairmen of the defaulter societies, and insisted that the produce of the societies be sold through the cooperative purchase and sale union. During the period studied, it was observed that all except 5 societies sold their produce through the cooperative purchase and sale union. In short, effective linking of credit with marketing was one of the significant features of the cooperative farming programme in Dhulia district.

3.47. Study indicates that a large number of members had to be provided with loans for the repayment of old debts. This was particularly so when the members had pooled their entire lands. As there were no special funds for meeting such requirements, the societies lent money to such members either from the land development loans, or the crop loans, obtaind from the Central Cooperative Bank. These loans were given in the form of advances out of the anticipated land dividend. The diversion of funds for such requirements reduced the availability of resources for land development and current farm expenditure. The study, therefore indicates the need for considering the financial requirements of members in their totality. Credit must be provided through institutional means not only for current farm expenses and medium term purposes, but, to some extent, also to assist members in meeting their old debts and their urgent requirements of a social and religious nature. Without this, members are likely to feel that by pooling their lands, they have jeopardized their capacity to assist their families. In addition, the Dhulia experience emphasises the need for long-term finance for major improvements in the land pooled. In the absence of such finance, programmes of continuous development cannot be formulated, and, without them, the societies will not be able to sustain the enthusiasm of members for long.

3.48. In Wardha district, the societies suffered for want of finance from the Central Cooperative Bank. The Bank provided only crop loans, which were inadequate when related to the needs of the societies. In many cases, therefore, the land development loans provided by government, was used for current farm expenses. Only 6 of the 11 societies of Wardha were provided assistance from the Bank. This varied generally, from Rs. 1,200 to Rs. 4,300 per society. One society was given Rs. 10,000 in its second year; in its first year it was given only Rs. 2,500. There was a trend, however, to increase the scale of finance, following prompt repayment in the first year. Unlike Dhulia, there was no organised agency in Wardha, like a District Federation, which could bring pressure to bear on the Central Cooperative Bank to provide finance, and on the societies to ensure prompt repayment of the loans obtained.

3.49. *Technical Guidance*—After the formation of Zila Parishads in Maharashtra, the function of registering the societies was transferred to the Zila Parishads. Before registration, whilst the economic feasibility of the proposal was examined jointly by the officers of the Agriculture and Cooperative Departments, considerations such as the willingness and capacity of members to work, and their farm habits were not adequately examined. As a result, some societies, whose pattern of organisation and methods of working did not conform to the byelaws, were also assisted.

3.50. In Dhulia district, the Deputy Registrar took a keen interest in the development of the programme, maintained constant contact with the societies and enlisted the support of other departments. Whilst he did so because he was personally interested in the programme, there was need for ensuring that the procedures and instructions of the various departments reflected this interest in cooperative farming. The Junior Extension Officers, (Gram Sevaks), appointed to look after the pilot projects, were generally, in-experienced and, as a result, the societies often did not consult them on agricultural matters. The District Federation could not provide adequate and continuing technical guidance for want of funds.

3.51. Although the accounts of the societies were audited promptly, uniformity in auditing and accounting procedures were lacking. At times. it was difficult to compare the audited accounts, over the years, even for the same society. The system of record maintenance, did not provide adequate information regarding crop planning.

3.52. Whilst the Agriculture Department advised at the time of registration, its subsequent association with the societies consisted mainly of approving their annual crop plans. These crop plans were generally approved, with minor alterations, as the Chairmen and members knew the needs of their societies better than the staff of the Agricultural Department, which rarely visited farms. In fact, the Agriculture Department had not even had a systematic study made of the soils of the societies, though procedures had been prescribed for this purpose.

Whilst, in Dhulia, the Animal Husbandry department had supplied sheep to 3 societies and appointed a stockman to assist, in Wardha, it was yet to help the societies in any significant manner. The other developmental departments took little interest in the cooperative farming societies.

3.53. As the procedures and instructions regulating various schemes were designed chiefly to benefit individual cultivators, the societies were often placed at a disadvantage. Thus, they were not eligible to receive subsidies for the purchase of oil engines, and the construction of wells, though individual cultivators received such assistance. Similarly, they could not obtain iron sheets from the Block, as these were issued only in the name of individuals. Difficulty was also experienced in obtaining loans under the Horticulture development schemes. The Animal Husbandry Department, in Dhulia district, had to allot sheep to individual members and not to the societies. The members then pooled their sheep. The study emphasizes the need to treat cooperative farms at par with individual farms. This is particularly necessary as cooperative farms have the potential, and are expected to function, as units of agro-industrial activity and mixed farming.

3.54. *Collective Farming Societies*—In the 5 collective farming societies selected for survey, of which one was case-studied, lands were cultivated collectively only in 3 societies. In the other 2 societies. the lands were distributed amongst the members for individual cultivation.

Two of the collective farming societies had a mixed membership, comprising of scheduled castes, backward classes, as well as other communities. Although, under the rules governing the formation of these societies, members other than those of the backward classes should be restricted to one-fourth, in both these societies, the members of the higher castes far exceeded this ratio. The other 3 societies were organised only with mempers from the scheduled castes. Thus, one society drew its members from the Thelari community, the second from the Vanjharis and the third from the Bhils. In the latter two societies, there was no joint cultivation.

3.55. The 5 societies brought under cultivation 77% of the 2,000 acres of waste land allotted to them. Dongardara society had cultivated 83% of its land. Except in one of the societies having a mixed membership, in all the others, the members worked on the farm. The wage rate in Dongardara society was fixed at Rs. 1.50 per day per member. The members, therefore, got an annual income of Rs. 540. They were also given the option of providing other labourers, in exchange, when they could not personally work on the farm. In the other societies, similar methods were followed, but the wages of members was restricted to Rs. 330 per year.

3.56. The 3 societies cultivating the land collectively, had sunk 4 wells and purchased 4 oil engines. The other 2 societies had brought 40 acres under seasonal irrigation. The scarcity of water and the inferiority of the land allotted, limited the introduction of improved methods. The use of fertilisers was also not possible. In Dongardara society, the gross value of crops per acre cultivated ranged between Rs. 70 and Rs. 80. In the other societies, per acre production valued between Rs. 50 and Rs. 55.

3.57. All the societies received assistance from the Cooperative Department according to the pattern. The Central Cooperative Bank, however, advanced loans only to those societies which adopted collective cultivation. Dongaradara society was financed at the rate of Rs. 60 per acre, whereas 2 other societies received crop loans at the rate of Rs. 12 and Rs. 15 per acre. It was curious that these 2 societies utilised only half the loan sanctioned by the Bank as they were afraid of increasing their liabilities.

Only Dongaradara society earned a profit in two of the three years it functioned. The profits were distributed as bonus to the members according to the quantum of work done. Whilst the other 2 societies in which land was cultivated collectively had also earned profits in one year, these were not distributed. One of the societies organised by the Thelaris was progressive, and was accumulating profits for future investment.

3.58. Whilst the supervising union had deputed a qualified manager to work as secretary of Dongaradara society, the manager of another society, (cultivating its lands collectively), came from among the members. In a third society, there was good leadership, even though the manager stayed in a nearby town and visited the society chiefly to write accounts. In the 2 other societies, the managers stayed at taluka headquarters and rarely visited the societies. The remuneration paid to these managers was very low.

According to the old Maharashtra Cooperative Societies Act, leaders or sympathisers organising societies of landless labourers could not become their members. In the new cooperative law however, such persons may be enrolled as sympathiser members, without any right to share in the profits or assets of the society. The association of such sympathiser members, who may be social workers or local leaders, can be of immense help in training and guiding the landless members, who are generally illiterate.

MYSORE STATE

In Mysore State, study was made of two pilot projects in the districts of Bangalore and Dharwar. Of the 33 cooperative farming societies existing at the time of survey, 13 societies had completed one agricultural year; these 13 were selected from detailed case-study. Of these, 11 were pilot and 2 non-pilot societies. The number and types of societies studied project-wise are given below:

Distt	Block	Jt. Farming Societies		Collective Farming Societies		Total
		Pilot	Non-Pilot	Pilot	Non-Pilot	
Bangalore	Magadi	4	..	..	1	5
Dharwar	Haveri	3	..	4	1	8
	Total	7	..	4	2	13

3.60. *Typology of Societies*—The societies studied could be classified broadly into five types. These are :

(i) Societies consisting of members belonging to a number of families and diverse castes, staying in different households, with differences in economic status—2—Sarvodaya (Magadi Project), Hosur (Haveri Project).

(ii) Societies composed of small cultivators belonging to diverse castes—2—Holeyur and Mahatma Gandhi (Haveri Project).

(iii) Societies organised in the interest of one big cultivating unit, with a preponderating majority of members from a single caste, organised with nominal members and attached labourers—2— Chakrabhavi and Tavarkere (Magadi Project).

(iv) Societies consisting of one lineally extended joint family, drawn from a single caste, started with attached labourers and nominal members—1 Halahalli (Magadi Project).

(v) Collective farming societies organised on Gramdan lands or Government waste lands, consisting of a single caste, ownership of lands vesting with the societies—6—Saibaba, Walmiki, Balabhim, Mohandas, Sarvodaya (Haveri Project) and Gramdan Sarvodaya (Magadi Project).

3.61. The features of the different types of societies and their performance are discussed in the following paragraphs:

3.62. *Motivation*—Of the two societies of Type I, one society (Sarvodaya) was organised by a reputed sarvodaya worker, who enjoyed the confidence of the village. Though the richest farmers did not join, about 26% of the families in the village joined the society with 29% of the cultivated land. The society, which had made a good start, became defunct after one year for want of an efficient farm management system, negligence and the hostile attitude of big farmers. The second society (Hosur) was organised by a socio-political leader. This also went the way of the first society, but for different reasons. The two big landowners who had contributed a part of the land,, did not cooperate with the organiser of the society. A group of four dissident members, (including the two big land-owners), created trouble in farm management. The organiser was contemplating liquidation of the society and a statutory enquiry under the cooperative law had been ordered.

In type II, one society (Holeyur) was started by small farmers, heavily indebted, who could not cultivate their lands. Government aid attracted them and the promoters organised the society under the notion that Government assistance could be distributed individually among the members. When the real concept was explained, they agreed to joint cultivation on condition that they should receive rent for the land pooled at local rates. The second society of this type, consisting of small farmers, was organised at the initiative of the president of the Panchayat Board who wished to gain in social status. As the father of the organiser, who owned the land, did not agree to pool his land, the father and son quarrelled and, as a compromise, the father pooled only a small part of his holding.

One society (Chakrabhavi) of type III, was organised by the trustee of the temple lands to evade the probable effects of tenancy legislation. A bigger landlord also pooled 2 acres in the name of his wife. The society was registered with a membership of relatives—wives and sons—and a Harijan. Other persons, like a fertilizer agent, were admitted. Except for the trustee of the temple and the Harijan member, others had no interest in the society. In their case, pooling was merely on paper. The second society of this type, (Tavarkere), was organised by a worker who desired to gain prestige and importance in politics. He organised the society with his farm servants. In this effort, he also secured the support of another big landlord and the President of the Panchayat Board, who was also interested in gaining social prestige. Both of them, however, pooled only part of their holdings. The father of the organiser, who was against the idea of cooperative farming, agreed to pool only a part of the land in order to satisfy his sons ambitions.

The society of Type IV was organised by a politically ambitious village level Congress worker. The membership of the society consisted of relatives and labourers who were working in a single joint household of a lineally extended joint family. Therefore, the pooling of land was on paper and Government assistance was utilised for development of the private farm business.

Of the six societies of Type V, *i.e.,* collective farming societies, four were located in one village (Haveri project). The Government waste lands, allotted to landless persons of the backward classes, (Harijans and Talwars), between 1952—59, could not be reclaimed for want of financial resources. In some cases, the land was too rocky to bring under cultivation. The lands belonging to the Talwar community were far away from the village. The members of the Harijan community approached a rich landlord of the village to provide his tractor for deep-ploughing. The landlord, being aware of the quality of land, was hesitant to give his tractor. He, however, promised that he would arrange for the services of the bigger tractors owned by the Government. He contacted the officials of the Agriculture and Cooperation Departments and learnt that if the farmers formed a cooperative farming society, they could avail of the services of Government-owned tractors and bulldozers on a preferential basis. He also learnt about the assistance available from Government to co-operative farming societies for purposes of land development. He advised the Harijan families to organise two societies, and they acted upon it. The Talwar community emulated the example of the Harijans and formed two societies. Thus, four societies were organised in one village.

The fifth society was organised by a Sarvodaya worker on a Government waste land of 18 acres to rehabilitate labourers who were victims of an agricultural labour strike. Out of 24 members, 20 were landless, and 4, having land, leased it to the society. The sixth society was a gramdan collective farming society. It was organised at the initiative of the Sarvodaya workers and had an interesting background. The landless labourers of Pilliganhalli, a deserted village, were working as labourers in the lands of the big cultivators of the neighbouring village. The land, measuring 38 acres, out of the 371 acres of Pilliganhalli village, was cultivated jointly by the village. The residents of Pilliganhalli were advised by a sympathetic revenue official, in 1932, to cultivate the Government waste land of 8 acres in the adjacent valley. The residents followed his advice and started cultivation. Irrigated crops like paddy, surgarcane etc. were grown. They cultivated the lands jointly and shared the produce equally. In 1940, two persons from the colony defaulted in the repayment of Government loan to the extent of Rs. 2,000. Government seized the bullocks and implements jointly possessed by the residents of the colony, and sold them in an auction for the recovery of its dues. This resulted in a stoppage of joint cultivation of the village land and the land was parcelled out informally and cultivated individually. In 1952, following a quarrel between the big land owners and the labourers of the colony, a part of the Government waste land was converted into pasture owing to the influence of the big land owners. The other part was allotted to political sufferers belonging to the depressed class. The Serva Sewa Sangh workers learnt about the condition of the colony and promised to re-obtain the Government lands for cultivation if the residents of the colony donated their individual holdings in gramdan. To this, the residents agreed. Thus, a gramdan village was set up in 1955. From 1955—59, the gramdan village could not achieve much in the social and economic fields. On the advice of the officials of the Cooperative Department, who also promised to get back the valley land if a cooperative farming society was organised, the sarvodaya workers and the residents agreed, as joint cultivation was not a new concept for them. The society was thus registered in April, 1960.

3.63. *Leadership Pattern*—In Bangalore district, the Sarvodaya workers had experimented in cooperative farming and had organised 3 societies. Unfortunately, these societies had proved a failure. When the programme of pilot projects was started in Magadi Block (Bangalore district) it commenced with a negative experience. According to the report the new societies were organised mainly through the efforts of Government officials. The Sarvodaya leader, who had organised joint farming societies earlier, also lent support to the programme. As joint cultivation had resulted in failure in his three societies, instead of learning from experience by correcting the defects, the non-official leaders avoided the introduction of joint cultivation.

In Dharwar district (Haveri Project) the leadership and guidance was provided by the Special Officer (cooperative farming) of the State, who belonged to the area. Prior to his appointment to the Government post, he had conducted some experiments in cooperative farming in Sangli district of Maharashtra State. Before independence, he was a political worker, who took an active part in the freedom movement. When the programme of pilot projects was started, two of his former colleagues, who were socio-political leaders, took an active part in the programme and themselves gave the lead by pooling their land. The two leaders considered cooperative farming as an aspect of social work. The officials of the Cooperative Department lent active support to the two local leaders and assisted them in various ways.

3.64. Comparing the features of leadership in the two projects, the report concludes that whilst the Sarvodaya leaders were intellectural and ideological, the leaders in Dharwar district were seasoned social workers with good practical experience of the field. As such, the latter advocated cooperative farming as an enlarged economic business of many small farm businesses. Being practical men and tradition biased they adopted the ways of traditional farming, its methods and procedures.

3.65. *Membership and Identification with Society*—The degree of identity of members with the societies depended to a large extent on the economic status of the members. The table below indicates the wide differences among members in joint farming societies.

Particulars	No.	Area (owned) (in acres)	Percentage of members to total
Big farmers	13	511·15	6·5
Medium farmers	23	212·28	11·5
Small farmers	42	145·25	22·0
TOTAL ..	78	868·68	40·0
Landless ..	120	..	60·6
	198	868·68	100·0

It would be observed that nearly 60% of the total membership in joint farming societies consisted of landless persons. This was largely accounted for by societies of Type I and Type III, where the working members were few and the societies were organised by bigger farmers. In the societies of Type IV, the landless were not admitted as members, even though a large number were employed. In societies of Type V, the members were generally landless, their status was nearly equal, and they belonged to one community forming a homogeneous group.

3.66. One important criteria for judging the identification of members with the societies is the extent to which they have pooled their holdings. In the seven joint farming societies case studied, 44% of the land owned was pooled. In other words, 56% of the land was retained for individual cultivation. The position regarding the percentage of land, pooled to owned, in joint farming societies, is given below:—

Type	No. of societies	Percentage of land pooled to owned land
I	2	46 to 68
II	2	24
III	2	35 to 68
IV	1	39

According to the report, the small holders had pooled all the land held by them, whereas, the big land holders retained sizeable portions of land for self cultivation. Even in the societies of Type II, which consisted of small farmers, one or two big farmers joined and pooled only a portion of their land. When analysed, the reasons for partial pooling were: (a) sympathisers and leaders pooled part of their land, their reason in joining the society being to secure social prestige. In two societies, it was observed that the land was held by the father of the organiser. The father, himself did not accept the concept of cooperative farming, but, to satisfy his son, he pooled, a part of his holding. (b) fertile lands were retained and inferior lands were pooled in the society in order to get them developed; (c) pooling of entire lands with the society was considered risky; (d) scattered holdings, located in other villages, could not be pooled.

3.67. Other resources like bullocks, implements etc. were also partially pooled in some societies.

3.68. *Agricultural Production*—Consideration of the performance of societies in agricultural production is vitally linked with the size of the farms, nature of land, type of membership, inputs, availability of funds etc. These aspects are considered in the following paragraphs.

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3.69. (i) *Size of Farms*—Of the seven joint farming societies, five had lands below 50 acres (two societies having lands below 20 acres). Of these, two were of Type II, two of Type III and one of Type IV. One society of Type I had the largest area amongst the societies studied *i.e.* 133 acres. The second society of Type I had 59 acres. In four societies, the per member land available was less than two acres and in one society it was 2.1 acres; in two societies, it was 3 acres. Examined from the minimum standard of 50 acres, prescribed by the State Government for the registration of a cooperative farm, the majority of societies were sub-standard or non-viable. This affected adversely their working, particularly those of Type II, where a large number of members were wanting employment. In these societies of Type II employment could be provided to a couple of members only. Some other members were also employed during peak hours. In the other societies this factor was less important, as only a few members worked on the farm.

In the societies of Type V, *i.e.* collective farms, the size varied from 55 to 97 acres, except in the gramdan collective farming society, which had an area of 18 acres. In three societies, the land available per member was nearly two acres and in two societies, 6 acres. In the gramdan society, the area available per member was 1.2 acres.

The lands held by these societies were inferior, being government waste lands having rocky soils. Therefore, in most cases, the size proved uneconomic in the initial period.

3.70. (ii) *Method of Cultivation*—In the Sarvodaya society of Type I, joint cultivation was undertaken in the first year, *i.e.* 1959-60, and the farm disintegrated, thereafter, owing to bad management and the adoption of incorrect procedures for land returns etc. In the second society of Type I (Hosur), joint cultivation faced a number of problems owing to differences amongst the organisers and the big land owners. The societies of Type II (Holeyur and Mahatma Gandhi) were engaged in joint cultivation but the small size of the farms limited their development. In the two societies of Type III and one society of Type IV, the pooling of land and other resources was on paper, and the members practised individual cultivation. In the case of these societies, the activities of private farms of the individual members and the cooperative farms were mixed. For this reason, no farm accounts were kept in these societies. The societies in Type V followed joint cultivation.

3.71. (iii) *Agricultural Improvements and Practices*—The report indicates that joint farming societies in Bangalore district made attempts to improve agriculture by adopting better techniques and better utilisation of resources. On the other hand, societies in Dharwar district continued traditional methods as they lacked resources and entrepreneurial talent. The collective farming societies succeeded in reclaiming waste lands by manual labour.

One society of Type I (Sarvodaya) used chemical fertilizers, bone meal and manures on a large scale. Fertilisers were used in the village for the first time by the society. It is significant that after disintegration of the cooperative farm, members individually used less fertilizers. Thus, whilst in 1959-60, the cooperative farm had used ammonium sulphate at the rate of 2.04 mds. per acre, the individual farms, in 1963-64, used only 0.92 mds. per acre. As regards super phosphates, the cooperative farm used 3.62 mds. per acre whilst the individual farms used 0.61 mds. per acre. The use of cowdung manure was also more intensive on the cooperative farm, which used 15.94 cart loads per acre whilst individual farms used 13.49 cart loads per acre. Urea and bone meal, which were used on the cooperative farm at the rate of 2.25 mds. per acre and 1 md. per acre respectively, were not used by individual farms. The society also introduced new crops, like banana and mulberry, on its irrigated area. Comparing the yields obtained on the cooperative farm, in 1959-60, with those obtained on the individual farms, in 1963-64, the study shows that production was higher when the cooperative farm was functioning. The production of ragi was 3.71 quintals per acre on the cooperative farm, whilst on the individual farms, it was 2.71 quintals per acre. In respect of paddy, the comparative production was 9.36 quintals per acre on the cooperative farm against 9.06 quintals per acre on the individual farm. Similarly, the production of horse-gram was 1.16 quintals per acre on the cooperative farm compared with 1.0 quintals per acre on the individual farms. As the data for production is compared over different agricultural years, due allowance in comparing the yields has to be provided for climatic variation.

In the second society of Type I (Hosur), manure worth Rs. 800/- and agricultural implements worth Rs. 600/- were purchased. It was not possible for the society to adopt improved practices owing to differences amongst members and the withdrawal of some of them.

The two societies of Type II, Mahatma Gandhi and Holeyur, consisting of small farmers, adopted traditional methods of cultivation. Before taking to joint cultivation, members could not individually cultivate the lands properly for want of resources and the weight of indebtedness. In addition, there was a limitation of resources and a lack of initiative.

One society of Type III, (Chakrabhavi), introduced better cropping patterns after organisation. New crops, like sugarcane and vegetables, were sown; horticulture was also undertaken. The area under mulberry was increased from 0.10 acres to 2.20 acres. In the same area, about 17 coconut trees were planted. About 150 mango trees and 100 glyricidia were also planted. In the first year, the society used fertilisers worth Rs. 300/- for ragi and paddy crops. One of the members, who was a fertiliser agent, provided the technical guidance required for the use of fertilisers. It is reported that the ragi crop grown on the lands of the society was the best in the village. In the second society of Type III (Tavarkere), as the lands were cultivated individually, authentic figures regarding inputs were not available. An acre of dry land was however, brought under mulberry cultivation. Halahalli society of Type IV functioned as a family farm and, therefore, data regarding inputs were not available. Two of the collective farms in Type V introduced new crops and adopted improved techniques of agriculture.

3.72. (iv) *Land Development and Irrigation*—Of the two societies in Type I, one society, (Sarvodaya), sunk a well and brought an area of 6 acres under irrigation. Two diesel engines were also purchased and put into operation. Societies in Type II could not undertake land development activities. One of the societies was against digging an irrigation well, as it was afraid that sub-soil water would not be available at a reasonable level. This fear arose from the fact that a collective farming society in the neighbourhood, though it had sunk a well and spent over Rs. 3,000, had not struck water. In Taverkere society, Type III, there was an increase in the area under irrigation by 1.15 acres. One diesel engine was purchased, but it was mostly hired to farmers in the village. According to the report, the rent received was not accounted. The second society of this type, (Chakrabhavi), brought an additional area of 6 acres under irrigation and purchased an oil engine. The society of Type IV, (Halahalli), increased its irrigated area from 7.13 acres to 12.06 acres over a period of two years. A well was constructed at a cost of Rs. 2.000 and an oil engine was also purchased for Rs. 3.500/-. The oil engine was also hired out to non-members.

The four societies of Type V, reclaimed an area of 230 acres out of the 297 acres held by them, *i.e.* 77% of their area was reclaimed, by manual labour, in the first year after formation. These lands, which had remained uncultivated for over 10 years, were brought under cultivation by the cooperative farms. In the absence of financial aid for current agricultural operations, the land development loan of Rs. 4,000/- was utilised for purchasing manure, seeds, payment of wages etc. The details regarding the area reclaimed, cost of production and the value of production are given in the following table:

Society	Area held (in acres)	Area reclaimed (in acres)	Seeds	Cost of production Manure	Cost of production Wages	Total	Value of production (in Rs.)
Balbheem ..	92	70	147·42	134·50	1,502 70	1,784	406
Mohandas ..	85	65	157·43	209·50	1,510·00	1,882	478
Saibaba ..	60	47	187·60	196·00	1,184·25	1,567·25	209
Kanakdas ..	60·26	48	206·21	201·00	1,105·75	1,512·96	183
	297·26	230	698·66	741·00	5,302·70	6,746·24	1,276

It will be observed from these figures that the value of farm production in two societies was lower than the expenditure made on seeds and manures. In the case of the other two societies, the increase in the value of production over inputs (excluding wages) was also marginal. As against the total cost of production of Rs. 6,746 the societies derived an income of only Rs. 1,276. This was because the lands were inferior. Without substantial capital investment, agriculture on such lands will remain uneconomic. In this context, the report observes that 'developments in the initial stages were associated with high farm costs and low agricultural yields.' The land development activities in these societies have, therefore, to be related to the bringing of increased areas under irrigation, through the sinking of wells, and the preparation of the soil through tractorisation. The efforts made by the societies to secure heavy tractors and buldozers had not succeeded in the first year.

The Sarvodaya Collective Farming Society (Type V) reclaimed, in two years, an area of 18 acres situated on the slope of a hill overgrown with shrubs. Levelling and bunding was also undertaken. Various crops like ragi, small millet, chilly and groundnut were grown .The society sunk a well at a cost of Rs. 3,000 but the sub-soil water had not been reached. A godown, costing over Rs. 6,000 was also constructed. In addition to the Government waste land, the society took 17 acres on lease from members and non-members and cultivated the area. The Gramdan collective farming society (Type V) faced problems similar to those of the other collective farming societies. The 18 acre farm was too small to prove viable and the land was inferior. After formation of the society, however, members obtained bullocks and implements for joint cultivation which they did not possess before. As only one crop was grown on the farm only a few members were employed on it. The others obtained employment outside.

3.73. The performance of societies in respect of agricultural production and land development must be viewed in relation to the availability of technical guidance and financial aid, which largely determine the nature of inputs. Technical guidance and financial assistance were not available, to most societies, in adequate measure. In addition in collective farms, the gestation period for economic returns is itself longer. As a result, in the initial period after organisation, they have to face the problems of high farm costs and low agricultural yields. The study emphasises that whilst registering collective farms, due consideration should be given to the economics of farm business, and technical and financial assistance provided on a scale that make possible their economic functioning.

3.74. *Farm Management*—Sarvodaya society, (Type I), had a large holding which was consolidated into three blocks. Work teams, headed by supervisors, were formed. These supervisors, who were medium or big cultivators, were paid for their supervisory work on the basis of the norms approved by the society for farm work. When the norms were introduced, the members welcomed the idea of providing an incentive for better work. The quality of work done by individual members was decided by the managing committee. However, the norms were not strictly enforced as members of the managing committee did not apply them impartially. As a result, punishment for negligence was very rare and, usually, every body was given 10 basic points irrespective of the quality of work. It was also observed that the bullocks and cows were not being properly looked after under the cooperative farm management. This factor was responsible, to some extent, for the disintegration of the society in the second year.

In Holeyur society (Type II) the appointment of a paid farm manager created difficulties. The members did not like the farm manager merely to issue orders to others. They desired that the farm manager should also work on the farm as he received wages like other members, Consequently, the manager had to resign and the President had to manage the entire farm in an honorary capacity. The members felt that payment for managerial work added to the overhead costs of the farm and was an unnecessary expenditure. They did not tolerate laziness in farm work.

In the gramdan collective farm (Type V), where the size was small, there was no problem of management. Decisions regarding farm operations were taken jointly. The President of the society and a few women of the colony looked to both the management and the operations on the farm. The other members went outside for employment.

3.75. *Employment*—Participation of members in farm operations is indicative of the character and functioning of the cooperative organisation. In the Sarvodaya society (Type I) all the 101 members participated in the farm operations; 92 members worked on the farm, wholly or partly, 6 in supervision and 3 in management and administration. In the second society of this type (Hosur) 5 members participated wholetime, and 10 casually. The remaining 4 were dissident members. In the societies of Type II (Holeyur and Mahatma Gandhi), whilst only a few members were provided continuing employment owing to the smallness of the farm, the other members also worked during the peak seasons. Including them, the participating members were over 70% in one case, but only 55% in the other. In the remaining three joint farming societies (Types III & IV) there was no joint cultivation. In one of these, 12 persons, who were not interested in the farm operations, were admitted to membership; in another, 5 sympathiser members were enrolled.

In 5 of the collective farming societies, all the members, being landless, participated in farm work. In one society (Sangur) only 6 out of 25 participated; nearly 17 persons were sympathiser members.

3.76. The remuneration paid to members for farm work was according to the rates prevalent in the area and varied according to the seasonal conditions. After the formation of a society, there was a change in the factor costs. Formerly, the family labour of members was not paid. After organisation of a society, however, wages according to local rates were paid for all the labour contributed.

3.77. Analysis of the remuneration paid for work to members and non-members, indicates that the share of the members in the wage-bill of the societies was substantial in Types I, II and V. In one of the societies of Type I (Sarvodaya) members received Rs. 4,742, 75% of this was earned by members holding lands less than 10 acres, of this, 50% was earned by members holding lands below 5 acres. The distribution of income amongst the different categories of members indicates that the total income of the farmers holding more than 10 acres was less in 1959-60 (when joint cultivation was undertaken) than in 1963-64 (*i.e.* after the society had disintegrated). On the other hand, farmers who owned less than 10 acres each, earned more income in 1959-60 than in 1963-64. This obviously is due to the fact that the residual income was shared in proportion to the labour input and not according to the size of the land contributed. In societies of Types III and IV, which were either family farms or those organised by big farmers and absentees, the members' share was very low and non-members secured a larger share. In societies of Type III (Tavarkere and Chakrabhavi) remuneration for work to some of the members was given in the form of meals. In the Gramdan collective farming society, (Type V) the members were not given remuneration for work in cash, but were getting two meals per day in the community kitchen. Most of the members appreciated the idea of stopping cash payments, as it helped in checking wasteful expenditure on items like tobacco and toddy. The good scheme got discredited soon because the village sarvodaya worker mismanaged the accounts of the community kitchen.

3.78. *Return for land*—In the joint farming societies, a system of paying fixed return for the ownership of land was followed. The land return fixed, however, were more than the limits of rent prescribed under the rules of the Tenancy legislation. The returns paid varied according to local rates from Rs. 30 to Rs. 50 per acre for dry land and Rs. 50 to Rs. 80 per acre for wet land. In terms of the value of land (which varied from Rs. 1,000 to Rs. 1,500 per acre for dry land and Rs. 1,500 to Rs. 2,000 for wet land) the land return fixed was about 3 per cent of the land value. In one of the societies, Sarvodaya, (Type I) a flat rate of 1 palla of ragi (about one quintal) per acre of dry and pasture land, and 5 pallas of paddy per acre of irrigated land, were prescribed. This led to discontent among farmers owning lands of superior quality. In all the societies, the land return was paid from the gross produce.

3.79. *Financial Assistance*—In the majority of societies, resources for share capital were raised in cash and kind. The share capital contribution in cash was, however, limited to Rs. 250/- in the case of four joint farms, Rs. 520 in the fifth joint farming society and Rs. 1,040 in the sixth society. In one of the joint farming societies, the entire share capital was contributed in kind. In two societies, of Type I and Type II, share capital in kind was not contributed. In four societies of Type V, the entire share capital was contributed in kind; in the gramdan society, a share capital of Rs. 110 was subscribed.

3.80. Four joint farms had received full financial assistance under the cooperation plan. One society of Type II received only share capital contribution and managerial subsidy. Another society of type II, received long-term loan of Rs. 4,000 and managerial subsidy. The societies consisting of small farmers (Type II), did not get full financial assistance under the cooperation plan. The Sarvodaya joint farming society (Type I) received financial assistance on a larger scale, *i.e.*, Rs. 18,600 (Rs. 15,700 loan and Rs. 2,900 grant) from the Cooperative Department. This society was formed before the scheme of pilot projects was started.

. In regard to the collective farming societies, four had received the medium-term loan of Rs. 4,000 and managerial subsidy. These societies neither received share capital contribution (Rs. 2,000), nor the godown-*cum*-cattle shed loan of Rs. 5,000 (Rs. 3,750 of which, could be used for land development). The gramdan collective farming society did not receive any financial assistance from the Cooperative Department. It did, however, secure assistance amounting to Rs. 6,939 from the Sarvodaya Friends Circle in Germany. Another collective farming society received financial assistance of Rs. 12,200 under the cooperation plan.

3.81. Two societies sponsored by the Sarvodaya workers received financial aid from the Khadi and Village Industries Commission for agro-industries. The Sarvodaya joint farming society (Type I) received Rs. 49,200 (Rs. 36,550 loan and Rs. 12,650 subsidy) for various cottage industries. The second society (type V) received a loan of Rs. 2.750 from the Khadi and Village Industries Commission and Rs. 4,300 from the War on Wants Association.

3.82. None of the 13 societies received short-term loans from the cooperative banks for current agricultural production. Consequently, all the societies used the long and medium term loan provided by Government, to meet their current agricultural requirements for bullocks, implements, manure, fodder etc. This led to the neglect of land development, particularly by the collective farms. According to the report, the District Central Cooperative Banks of Dharwar and Bangalore were reluctant to advance loans to cooperative farming societies. According to the study, the main objection appeared to be that the pooling agreement, made by the members of a joint farming society, was not registered under Indian Registration Act.

3.83. The information available for collective farming societies indicates that they operated at a loss. The reasons for the losses have been indicated earlier. As regards the joint farming societies, information available for three societies shows that two societies had incurred marginal losses, and one, organised by the small farmers (Type II) expected a profit of Rs. 1,800/-. The financial statements of the remaining societies were not available, as the societies were either family farms or the accounts were not properly maintained.

In two societies of Type II, members had prior debts; in Mahatma Gandhi society three members were indebted to the extent of Rs. 2,900/-. In the Holeyur society, 13 members were indebted to the extent of Rs. 10,940/-. In these societies, the members were given advances of Rs. 1,832/- for redemption of their debts, recoverable against the land rent due to them. The study reveals that owing to indebtedness, the small farmers found the development of their lands more difficult.

3.84. *Cottage and Village Industries*—Of the 13 societies case studied, three societies sponsored by the Sarvodaya workers (in Type I and Type V), took up cottage and village industries. The Sarvodaya joint farming society (Type I) received assistance for the starting of four industries *viz.*, (i) hand pounding of paddy, (ii) village oil ghani (edible oil) (iii) production of non-edible oil and soap making (iv) gur and khandsari. Capital was invested in the purchase of equipment and the construction of buildings for all the four industries. Work, however, had been started only in the village oil ghani unit. One man and one woman were provided employment for six months by this unit. They were paid fixed salaries of Rs. 40 and Rs. 20 per month respectively. The oil processed was sold in the village itself.

The Sangur collective farming society obtained a loan of Rs. 2,000 and a subsidy of Rs. 750 from the Khadi and Village Industries Board to start a fibre industry. The brother of one of the members was sent to receive training in batar weaving. By March, 64, he had completed his training. In the Gramdan collective farming society members had taken to sheep breeding. When the Sarvodaya workers suggested the construction of a community hall, worth Rs. 6,000/-, out of the donations received from the Sarvodaya Friends Circle in Germany, the villagers preferred to utilise the funds for economic activities such as the rearing of sheep, pigs and buffaloes. As this money could not be diverted for production purposes, the Sarvodaya workers subsequently provided separate funds for undertaking sheep rearing.

3.85. *Study of Attitudes*—The success of a cooperative farming society depends not only on its business efficiency but also on the manner in which the human aspects of the man-management are tackled. A study of the attitudes of members is, therefore, important as it indicates the health of the cooperative organisation and reveals its potentiality for development. The position in the societies case studied is discussed below:

In one society of Type I (Sarvodaya) the initial enthusiasm generated in the members at the time of organisation was not maintained owing to faulty procedure prescribed for determining land returns, bad management, neglect of cattle etc. When the big farmers withdrew their land, others followed suit and the society disintegrated after one year. In the second society of the same type, (Hosur), the two big farmers who had contributed a major portion of the land, did not cooperate with the organiser and created difficulties. In effect, even the labourers ceased to cooperate with the President, who had to carry on the farm business with the help of his son, wife and other outside members. Every member, except the president wanted the society to be liquidated. The president was also coming to this view as an inquiry had been ordered by the State Registrar.

The two societies in Type II were handicapped by the limited size of the farm which restricted the scope for employment. In spite of the fact that one of the societies was expecting a profit, lack of employment opportunities created frequent differences between the members and the management. Unless the size was enlarged, and ancillary activities undertaken, it would be difficult to keep the members satisfied.

In one society of Type III, most of the non-members were unaware of the existence of the cooperative farm in the village. Those who knew of it, thought that there was no joint cultivation. According to the survey, they also expressed the view that the society was formed in order to spuriously obtain Government assistance. While a few members were dissatisfied and wanted to leave the society, most were in favour of maintaining the status quo. In the second society of Type III, the majority were disinterested in the cooperative farm. Part of the lands had remained uncultivated for want of resources. Consequently, some of the members left the society.

In the society of Type IV, most of the sympathizer-members, and those who worked without pooling any land, were, in reality, indifferent to the existence of the society. They joined the society as they had high regard for the chairman. Each member felt that the chairman would make some improvements in the land. The members had no stake in the society, as even the share capital was contributed by the chairman. Some of the members secured personal advantages, such as free use of the diesel oil engine, bullock carts etc. Each of the members felt that joint cooperative farming was not practicable.

In the case of Gramdan collective farming society (Type V), the mismanagement in the running of the community kitchen by the Sarvodaya worker, and the failure of the sarvodaya leaders to take action against him, led to abandonment of joint cultivation. Four members, however informally continued joint cultivation. Collective farming society (Type V) had created an impact in the village and the surrounding areas. The society acted as a catalytic agent for the organisation of other societies in the neighbourhood. The appreciation received by the organiser of the society induced some of the political leaders to take up the organisation of cooperative farms. The four collective farming societies were faced with the problem of uneconomic use of land. Unless they are helped, their hopes in joint cultivation were likely to be frustrated.

3.86. *Technical Guidance*—The case studies indicate a lack of scientifically prepared production plans and land development programmes. In spite of the policy instructions of the State Government, the extension staff and other developmental departments did not provide the necessary technical know-how to the societies. The cooperation department did not provide adequate guidance in the aspects relating to management and operation.

CHAPTER IV

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, MADRAS, FOR THE STATES OF MADRAS, ANDHRA PRADESH AND KERALA

The Madras Agro-Economic Research Centre made a study of the programme in the States of Madras, Andhra Pradesh and Kerala. In total, 15 cooperative farming societies were studied. These included 7 joint farming societies, organised in 4 pilot projects, that had completed one year since their formation, 3 old societies, one in each State, and 5 collective farming societies newly registered on the waste lands of district Nellore (Andhra Pradesh).

4.2. State-wise, the number of societies studied was as follows:

State	Joint farming societies		Collective varming societies		Total
	Pilot	Non-pilot	Pilot	Non-pilot	
1	2	3	4	5	6
Madras	2	1	..	..	3
Andhra Pradesh	3	1	..	5	9
Kerala	2	..	..	1	3
TOTAL	7	2	..	6	15

4.3. When analysing the various types of societies formed, a broad distinction must be drawn between those organised in Madras and those formed in Andhra Pradesh and Kerala. Whilst individual societies formed in the latter two states can, broadly be classified in the general types observed in other parts of the country, the societies of Madras have certain unique features. This is because, in Madras, the general pattern of organisation in pilot projects, deviates in many important respects, both in accepted theory and practice, from the principles suggested by Government of India. As a consequence, whilst the Madras societies can be classified in terms of membership-composition, as are societies in other States, the general characteristics normally observable in a society of a particular type, do not hold good for Madras. The special features of the programme in the State *e.g.*, the extent of official leadership and the more liberal pattern of governmental financial assistance, require that the societies of this State be classified separately. As such, for purposes of analysis, the societies of Andhra Pradesh and Kerala are being considered first.

4.4. Broadly, the societies of these two states can be classified as follows: —

Type I—Societies formed by small and medium farmers, closely linked by ties of kinship and caste. These include 2 societies organised in Andhra Pradesh (Godavari and Krishna).

Type II—Societies formed by small and medium farmers, belonging to diverse castes and kinship groups. These include 2 societies organised in Kerala (Kadakkavoor and Angamaly).

Type III—A society formed by a large landowner, in order to defeat tenancy and land ceilings legislation. Of this, there is one example in Andhra Pradesh (Nagayalanka).

Type IV—Collective farming societies, formed primarily on government waste lands. These include 5 societies recently registered in Andhra (Siripuram, Darlpudi, Thirumalapeta, Shree Seethanagaram and Ramapuram). Also included is 1 society of Kerala, formed many years ago, and which has a number of lessons to offer (Kanjoor).

Type V—A society formed by Harijans, on certain lands gifted in Bhoodan (Kolleru).

4.5. Against this, in Madras, the 3 societies studied have certain common characteristics that set them apart. Thus, in each of them, there are two classes of members *i.e.*, 'A' and 'B' one comprising landowners and the other comprising labourers; individual holdings are only partially pooled in the society (on an average, 60% is retained for individual cultivation); a government official works as manager of each society; member-participation is conspicuously lacking both in farm operations and in management.

4.6. Even so, within this overall type, each society studied represents a sub-type. Thus, one society (Krishnanpatti), comprised medium and small farmers who were united by ties of kinship and caste. This society, therefore, has a certain affinity with the societies of Type I of Andhra Pradesh. Another society **(Kaveripuram)**, organised by a large landowner anxious to evade land legislation, bears similarity to Type II of Andhra Pradesh. The third society, comprises heterogenous membership of large, medium and small farmers, dominated by the President and his relatives, who form the largest land-owning group.

4.7. The various aspects of the programme in these three states may now be considered, with particular reference to the different types of societies formed. The nature of leadership provided assumes cardinal importance in this context, for through it, to a large extent, is reflected the motivation of those who organise societies and the consequences of this motivation on the working of societies.

4.8. *Leadership Pattern*—In none of the states did the cooperative farming programme have the organised backing of any political party or non-official organisation. This has told on the support lent to the programme. In a certain instance, the dominant political group, drawing its support from the traditional village leadership, was hostile to the programme and made every effort to prevent the organisation of a society of landless labourers. Individual members of political parties, however, did in certain instances, take on interest in the formation of societies. In Andhra Pradesh, two opposition M.L.A's took a keen interest in the organisation of two societies. In Kerala, the rivalry of political parties was affecting the daily working of an important society.

4.9. In Madras and Kerala, the organisation of societies was generally the result of official initiative. In the former state, the role of officials continued to be felt even in the day-to-day working of societies, as an inspector of the Cooperative Department was appointed manager of the society and, in certain cases, the Board of Management was nominated. As a result, even in societies in which the President wielded considerable personal influence, the bulk of members felt that they had leased their lands either to him or to Government. Consequently, member-participation both in farm operations and dcision-making was scant, and, in some cases, members considered themselves mere rent-receivers. This, in turn, frequently led to dissatisfaction; members found it convenient to blame Government both for what it did, and for what it failed to do.

4.10. In Andhra Pradesh, official influence in organisation and decision-making was less; the President and members of societies, particularly those of Type I, illustrated a high degree of purposiveness. The office bearers of both the societies studied of this type had the support of their members. There was also satisfaction of the efforts being made by the societies both amongst members and non-members.

4.11. The studies indicate the crucial importance of non-official leadership. Where this is not forthcoming, officials alone find it extremely difficult to sustain the programme.

4.12. *Membership: Identification with society and motivation*— The typological characteristics of societies throw interesting light on the degree of identification of members with their societies, as also the motives leading to their formation. Thus, in societies of Type I, small and medium cultivators, compelled by economic necessity, had come together to find a solution to their urgently felt needs. In one of these societies, there were 12 members, belonging to 11 family units. These families were all Harijans and closely linked together by ties of kinship. Rather than parcel out, for individual cultivation, the 147 acres which they jointly obtained in 'patta' and 'inam', after a period of mutual aid, they formed a joint farming society. They felt that the interests of improved production would be better served by pooling the lands. They also felt that it would be possible to increase irrigation and obtain more credit and services by forming a society. As a result, not only has land been fully pooled but also implements, bullocks etc. The identification of members with their society, is, therefore, high and all members actually participate in farm operations.

4.13. Comparable to this society is the other society of this type, also observed in Andhra Pradesh. 14 members, belonging to 4 main family groups of the kapu community, fully pooled the 167 acres owned by them, along with their implements and bullocks. Here again, traditions of mutual aid easily made way for greater cooperation. Each of the 14 members of the society works on the farm and the motivation is similar to that of the members of the society mentioned above.

4.14. The 2 societies of Type II, observed in Kerala, were formed in an area where lands were being allotted individually to ex-servicemen. Whilst the members of these societies were small and medium-sized farmers, they belonged to a number of castes and family groups. Thus, one society having a membership of 55, comprised 37 distinct family groups, belonging to 12 different castes. The other society having a membership of 47, comprised 29 family groups belonging to 10 different castes. Advised and encouraged by the local officials, these farmers decided to form joint farming societies. The general motivation guiding them, was to improve their lands by obtaining governmental assistance. There was, however, incomplete understanding of the full meaning of joint farming both in matters of organisation and operation, as also in matters concerning the duties and obligations of individual members. This was illustrated, on the one hand, in partial pooling and, on the other, in a tendency to blame the directors when controversies arose. Thus, in one society, only 112 acres out of 325 acres owned were pooled, and, in the other, only 108 acres out of 360 acres owned were pooled. This, even taking into consideration the fact that the terrain of Kerala makes complete pooling difficult, meant that only 30% of the members' lands were pooled. At the end of the first year, each of these societies was dividing into 2 smaller, more compact, units.

4.15. The society of Type III studied in Andhra Pradesh comprised 34 members. 10 members from 5 families pooled 225 acres, and 9 members pooled 24 acres. The remaining members were landless. The composition of the society was entirely heterogenous. The large landowners were keen to avoid tenancy and ceilings legislation, the small farmers were included to give a semblance of cooperative activity. Only 6 members worked on the farm, the others were absentees.

4.16. The collective farming societies indicated in Type IV fall in two categories, firstly, the 5 societies recently registered in district Nellore, Andhra Pradesh and, secondly, the old collective farming society that has been in existence in Kerala since 1944. The societies of the former category comprised, in all cases, landless labourers who were Harijans of various communities. The membership of these societies varied from 28 to 144 and the lands assigned from 123 acres to 390 acres. In actual fact, however, two societies were yet to start cultivation (the lands assigned being under forest), one society had reclaimed only 25 out of 213 acres, whilst the other two had reclaimed 91/390 acres and 26/123 acres respectively. Whilst there was a high degree of homogeneity amongst members, and a determination to reclaim land and begin cultivation, the problems faced in these societies were herculean, they are indicated more fully later.

4.17. The society formed on Bhoodan lands (Type V), had 31 members who were all Harijans and closely inter-related. The total land pooled was 109 acres, of which 27 acres were wet and 82 acres dry. This land was distributed equally among the 31 members, each getting 0.87 acres wet land and 2.65 acres of dry land. Though there were 3 wells only 1 was in working condition. As such, only 14.98 acres were being cultivated and the rest of the land was being used for grazing purposes. These lands were far from the village and still undeveloped. There was little common urge amongst either the members, or the local Bhoodan workers, to encourage actual cooperative farming. The 14.98 acres were, therefore, being cultivated individually.

4.18. Of the 3 societies studied in Madras, one, as mentioned earlier, was composed primarily of medium and small cultivators. To a certain extent, as in societies of Type I, these farmers came together in order to satisfy their felt-needs. They were all Harijans and were also closely knit by ties of kinship. There was, therefore, a high degree of homogeneity. Even so, identification with the society was incomplete. As in the case of other societies studied in Madras, there was only partial pooling of lands. Members retained their garden lands for individual cultivation and concentrated on them. A belief therefore grew that the object of the society was to enable only the improvement of dry lands. This, in turn, led to heavy reliance on governmental finance and supervision. In the absence of a sense of personal participation, outside labourers were heavily employed and the benefits of employment potential created through investment and better techniques were neither fully understood nor obtained by members.

4.19. More graphically, the effects of motivation and the composition of societies is illustrated in yet another case from Madras. The society in question comprised heterogenous members, big, medium and small. There were 9 members owning more than 20 acres each, 17 owning about 7.5 acres and 21 owning less than 7.5 acres. Whilst the total land owned by these 47 members was 564.97 acres (of which as much as 220 acres were irrigated), only 165.77 acres were pooled (of which only 18 acres were irrigated). It is also significant that the larger landowners pooled a small % age of their total holdings than the smaller landowners. Whilst the society was able to achieve remarkable production results, it nevertheless ran into heavy losses. This was because (a), member-participation was poor and unnecessarily high wages were paid to outside labourers, (b), even the small farmers did not have a sense of "belonging" to the society. They believed that the purpose of the society was to develop dry lands and that the duty of so doing rested with Government, or the President, to whom they had 'leased' their holdings. The conclusion to be drawn, therefore, is that in a society composed of heterogeneous members, a sense of indentification with the society is more difficult to create. Whilst production might increase, owing to better land-use, planning and investment, the society, as an institution, may, paradoxically, not derive corresponding results from any of these factors.

4.20. *Agricultural Production*—The capacity of cooperative farming societies to increase production was related to external financial assistance. This determined, to a large extent, the nature of inputs. Despite acute difficulties on this score in Andhra Pradesh and Kerala, it is significant that yields on cooperative farms were generally higher than those on individual holdings. For instance, amongst the societies of type I, in Godavari, the gross value of yields per acre was Rs. 119 on the fields of the society when compared with Rs. 70 on the fields of individual cultivators having similar lands in the area. In Krishna, yields achieved after formation of the society show an improvement on the position obtaining before the pooling of lands. The lands were also used more intensively after the society was formed, the gross area cultivated increasing by 13 acres in the first year after organisation. Only in the case of one society, studied in Kerala, were yields less than on individual holdings. This was attributed to late transplantation of paddy owing to delays in obtaining finance. In Madras, where finance was liberally available, the yields of one society were 50% higher than those on the fields of non-members.

Examined more closely, some important factors having a bearing on agricultural production are:

4.21. (i) *Increased Irrigation*—Both societies studied of Type I had used the meagre assistance made available to them for this purpose. Each had purchased an electric pump-set, one had also repaired an existing well. The need for greater irrigation is even illustrated in the case of the society formed on Bhoodan lands. Here, too, such a pump-set had been bought in anticipation of an electric connection. In Kerala, the old collective farming society studied had brought under irrigation 34 acres, through the construction of wells and a tank. In Madras, where finance was more easily available, the 3 societies studied had constructed 2 new wells and 4 more were being completed; 1 electric engine and 5 oil engines had also been purchased.

4.22. (ii) *Land Improvement*—Here again, the relationship between external financial assistance and performance is close. Thus, in Andhra Pradesh, where finances were not forthcoming, no detailed schemes could be formulated. In particular, the societies registered on waste lands were facing acute difficulty. Whilst one society had reclaimed 91 acres, the others were still, generally, unable to make the most of the lands assigned to them. In Kerala, the old collective farming society, registered in 1944, had, over a period of years, brought 210 acres under cultivation from what was forest land formerly. In so doing, it has spent over Rs. 30,000 on reclamation and Rs. 4,000/- on bunding. In the absence of adequate long-term finance, however, it had, at times, utilised short-term finance for this purpose. In contrast, in Madras, where long-term resources were available the 3 societies studied systematically undertook reclamation and bunding work valuing nearly Rs. 12,000/-.

4.23. (iii) *Improved practices*—The desire and capacity of cooperative farming societies to adopt improved practices is clearly indicated in the studies. Thus, improved seed was being used, or proposed to be used, in all the societies that were functioning. In Andhra Pradesh, of the two societies of Type I, one obtained seed from the Agriculture Department, whilst the other placed its requirement for the coming season. What is significant is that, in the village in which the former society was located, none of the non-members used improved seed. In a similar way, the latter society showed the way to the village in the use of improved implements—none of the individual farmers used iron ploughs. In Kerala, the societies of Type II also showed a keen desire to use improved seed. Both societies of this type applied to the Agricultural Research Station for this purpose. However, the needs of only one were met. The study, therefore, points to two facts. Firstly, the greater capacity of cooperative farming societies to take up new ideas, and secondly, the immense need to ensure that the administration does not fail in providing either the initial guidance, or the subsequent facilities for which a desire has been awakened.

4.24. Whilst a great deal remains to be done to ensure the latter condition, the studies point to certain important results that have followed the organisation of societies. Thus, in many instances, there have been significant changes in cropping patterns, greater intensity in land use, and commercial crops have been widely sown. For instance, in Andhra Pradesh, in one society of Type I, the area under castor and groundnut rose from 38.7 per cent in 1962-63 to 53.2 per cent in 1963-64. At the same time, the area under kharif crops increased from 53 acres to 67.65 acres. In the other society of this type, the cropped area increased by 13 acres in the second kharif season.

4.25. In Kerala, one society of Type II took a second paddy crop on 6 acres; prior to the society, there was no double cropping on these lands. In the collective farming society of Kerala, not only has cropping been intensified *e.g.*, three paddy crops are now taken on certain tracts but efforts have also been made to undertake mixed cropping. Thus in 1962-63, in the first season, the cropping pattern for 227 acres was as follows: cotton 20 acres, paddy 2 acres, tapioca 130 acres, bananas 9 acres, gingelly 1 acre, coconut, arecanut, pepper, tamarind and jack fruit 15 acres, rubber 30 acres (out of which 10 acres were sown for the first time in that season), and pine-apple 20 acres. In the second season, the area under paddy rose to 8 acres and in the third season, it rose to 16 acres.

4.26. In Madras, similar changes were demonstrated. For example, in 1962-63, one society had 42 per cent of its lands under groundnut and cotton, compared with 19 per cent under these crops in the rest of the village. In the other societies, too, there was a marked trend towards high-yielding crops. Thus, in one of them, out of the total cropped area of 68.75 acres, 46.63 acres were under groundnut, cotton vegetables and bananas.

4.27. Apart from better seed and cropping practices, the formation of a society facilitated the use of crop protection measures. Many of the societies studied were using insecticides, purchasing sprayers etc. Similarly, there was a distinct trend in favour of chemical fertilisers.

4.28. Despite these positive trends, certain negative features have also been noticed. The transition from individual cultivation to cooperative farming has not been complete in certain respects, the potentialities of size have not been fully exploited, and, at times, administration has failed to press the services of scientific agricultural knowledge to the needs of the cooperative farms. Some of these difficulties illustrated from an assessment of the economic performance of societies are illustrated below:

4.29. *Farm Management*—Some of the improvements which could have accrued from cooperative farming were rendered difficult for four main reasons: (a) the absence of complete pooling in Madras and Kerala the bye-laws themselves allowed partial pooling of individual holdings; (b) the continuance of individual holdings of nonmembers within the area of operation of a society; (c) the absence of consolidation of holdings legislation and (d) the shortage of developmental expenditure in states other than Madras.

4.30. The results of these difficulties became more pronounced because the size the cooperative farm, when related to membership did not provide the potential for full employment. Thus, whilst in Andhra Pradesh the size of societies varied from 100-250 acres, the average membership was about 20. In Madras, the average size of a pilot society was 84 acres, and the average membership 31, in Kerala, whilst the average size of a pilot society was 45 acres, the average membership was also 45. In these circumstances, the capacity of a society to provide full employment would depend upon its providing a continuous programme of developmental activity and promoting subsidiary industries and occupations.

4.31 *Employment*—In none of the societies studied was adequate care given to providing fuller employment. Whilst, in Andhra Pradesh, the members of the societies of Type I all participated in farm operations, no significant steps were taken to create new employment. Thus, in Godavari, though the total area pooled was 147.12 acres, in 1962-63 only 53 acres were sown. Whilst, in 1963-64, the net area sown increased to 67.90 acres, the area unsown was 79.22 acres. The case study points to the need for a proper scheme for land development, adequately financed, in order to step up both production and employment only for about 4 months in the year. In Krishna, similarly, the farm provided employment to its members for about 6 months in the year. In Kerâla, too, where members were keen to work on the farm, many had to go outside in search of work. Thus, in Angamaly (type II), the average number of work days per member was about 100 in 1962-63; some members stated that they would have offered more labour but that there was no more work to be done on the farm. Similarly, in Kadakkavoor, on an average, a member worked for about 140 days in 1962-63. Only in Madras were schemes prepared and financed that generated employment. However, the full implications of the developmental expenditure involved were neither understood nor made clear to members.

4.32. In this state, an average of Rs. 57,000 (as loans and grants), was made available as assistance to each society. On an average, each society invested Rs. 10,500 on capital items. As half of this was expenditure on wages, the total additional employment provided by the society was about 5,000 labour days or 20 man years. Unfortunately, owing to the nature of membership in two of the three societies studied, and incomplete appreciation of the purpose of cooperative farming in all three, the benefits of this expenditure did not adequately accrue to members. Instead, works were given on contract to outsiders, and even for normal agricultural operations, non-members were engaged. As a result, the society experienced losses and its members remained under-employed in spite of increased production and heavy investment.

4.33. *Subsidiary Industries*—The inability to undertake industries allied to agriculture, though possibilities existed in many areas, also indicates that employment opportunities were not built up. Whilst, in certain societies, members individually kept poultry, sheep and milch cattle, no organised effort was made to start agro-industries in a technically appropriate and economically viable manner.

4.34. *Economies of Scale*—Whilst production economies were generally effected by reducing the number of cattle maintained in a society, the benefits were sometimes offest by paying heavy wages to non-members. This, as has been indicated earlier, was particularly noticeable in societies where member—participation itself was less. Indeed, in one society of Madras, where production was remarkably high, the society incurred heavy losses for this reason. Furthermore, inspite of the lands of this society being in one compact block, an absence of member-identification with the society not only led to reliance on outsiders, but also led to improvident expenditure. Thus, without adequate planning, the society purchased 10 new pairs of bullocks soon after formation.

Both in Madras and Andhra Pradesh, the organisation of societies led to a reduction of cultivation units. This was particularly so in Madras, where only those lands were pooled which could conveniently form compact blocks. In Kerala, on the other hand, the joint farming societies studied had their lands extending over a thin strip of 2 miles each. The distances involved, owing to the nature of the local terrain, rendered economies of scale difficult.

4.35. *Return of Ownership*—The case studies point to certain difficulties being faced by societies in devising systematic methods of distributing gross production. Amongst the societies of type I, studied in Andhra Pradesh, after harvest the members were given their shares of the produce to clear old debts due for repayment to money lenders. In Kerala, both the societies of type II experienced difficulty in arriving at a satisfactory system for the payment of a return for ownership. Whilst it was intended that the return for ownership should be given at 6 per cent of the valuation of the lands pooled, accurate valuation presented certain problems. As a result, in one case, a uniform rate was fixed regardless of the quality of the land, whilst, in another, the amounts actually received were less than the 6 per cent of land valuation desired by the members. In both cases, this created discontent.

4.36. *Financial Assistance*—Only in Madras was finance from Government available in adequate measure. In contrast, in Andhra Pradesh, out of the 8 societies studied, only 3 had received assistance from Government. The maximum received was only Rs. 4,000. This inadequacy in finance curtailed the capacity of societies to plan for the future. In particular, the societies of type I, comprising small and medium cultivators with scant resources of their own, were at a disadvantage. In Kerala, the societies had generally been financed in accordance with the pattern of assistance currently approved by the Government of India.

4.37. The studies clearly indicate the inadequcy of the existing pattern of assistance. Unrelated as it is to the size of the farm, and specific projects of development, it has sometimes contributed to the splitting of societies. Thus, in Kerala, certain societies had split into 2 or more in order to draw additional assistance individually.

4.38. As regards assistance from the block and other developmental departments, the position is unsatisfactory in all the states. Whilst, in Madras, there was less need for such finance owing to the enhanced pattern of assistance from the cooperative department itself. in the other two states such assistance was not forthcoming in the requisite manner.

4.39. Nor were funds flowing from cooperative financing agencies as easily as they should. Whilst. in Madras, the societies studied were receiving short-term loans in time and, generally, according to their production needs, in Andhra Pradesh the position was extremely serious. Inspite of Government guarantee being provided, none of the societies studied, except one, received production finance, even though production plans were prepared and approved by the technical officers. The one society of Andhra Pradesh which received short-term credit was the society of Type III—*i.e.* a non-genuine society, formed to defeat land reforms legislation. This society received short-term credit each year. However, the state Government specifically refused any financial assistance to this society.

4.40. In Kerala, whilst production finance was forthcoming, it was, at times, seriously delayed. This led to difficulties in executing plans for the year.

4.41. Medium and long-term loans from the cooperative farming agencies were not available to any society. This posed a serious problem: at times, it resulted in the diversion of short term credit for medium-term purposes.

4.42. *Old Debts*—In the case of societies formed by small cultivators and landless labourers, the problems created by the old debts of members assumed considerable importance. In one case, where a society had built up its own resources, it was able to assist members financially in meeting some of their 'consumption' requirements. However, in the case of both societies of Type I, studied in Andhra Pradesh, the old debts of members rendered advantageous marketing of produce impossible. On completion of the harvest, members were compelled by necessity, to sell their shares of the produce, individually, in order to clear the amounts owed to money lenders.

4.43. *Technical Guidance*—This subject assumes crucial importance in any analysis of the working of the programme. The studies indicate many significant points. Whilst it can be said that the Extension Officer (Agriculture) and the District Agriculture Officer generally assisted in scrutinising the production plans prepared by societies, active interest in their working and subsequent follow-up were lacking.

4.44. In Madras, where a senior inspector and fieldman were appointed for each society. better results should have been achieved. However, the appointment of these officials encouraged members in their belief that they were rent-receivers. The officials, in their turn, did not take the interest that was expected of them. Indeed, in certain cases, they resided away from the village in which the society was located. Their influence, therefore, was negative. In Andhra Pradesh and Kerala, on the other hand, only one official of inspector rank was appointed to guide the societies formed in a pilot project block. This official was unable to cope with the legitimate demands made on him by the societies in the area. His position was worsened by the virtual absence of assistance from the block development office and the district level technical staff. The studies, therefore, point to the imperative need for strengthening technical guidance without curbing the sense of association of members with the working of their societies.

4.45. *Collective Farming Societies*—Whilst the main issues thrown up by the studies have been indicated in the foregoing analysis, a special mention is required of some of the problems facing collective farming societies.

4.46. Study reveals that, in Madras, as yet, no collective farming societies properly speaking have been registered. In Andhra Pradesh, on the other hand, many were dormant, though registered. Indeed, in this state, whilst the Cooperative Department was being asked to encourage the formation of societies on waste lands and other lands under Governmental control, in actual fact, Government itself was not united in its approach. Thus, the Board of Revenue was lukewarm in its attitude regarding the allotment of lands and the Hindu Religious Endowment authorities gave no support. The result of this was a slow death of societies even in areas where they had good prospects of development. Indeed, in one case, it took a society nearly four years to have the lands assigned in its favour, and, then too, they were allotted for only one year. Throughout this period, a prolonged and seemingly endless dialogue ensured between the various departments. In the absence of a long lease, though the lands were in need of Development, no medium term loans could be granted.

4.47. Quite evidently, therefore, a great deal remains to be done in this State to coordinate, more fully, the approach of Government itself to the needs of societies formed on waste lands. To a lesser extent, similar difficulties were also faced in Kerala. The collective farming society formed in 1944, at one stage came close to liquidation as Government resumed part of the assigned lands. The studies, therefore, point to the need for a clear policy regarding the allotment of waste lands, on a long term basis, to collective farming societies. Where there is some degree of security, results have been encouraging. Thus, the society of Kerala, having weathered its difficulties, has not only introduced a variety of improved practices and stepped up production, but has also built up its own assets. Since 1957-58, the total income of the society has risen from Rs. 10,747 to Rs. 50,972 in 1962-63. During this period, its investment per acre has increased from Rs. 110 to Rs. 188. The total assets of the society, which were Rs. 5,583 in 1944-45, rose to Rs. 40,896 in 1954-55 and to Rs. 1,25,782 in 1962-63.

4.48. Besides the need for long term allotments, the need for finances, adequate for the purposes of land development and reclamation, is also indicated. These societies must be supported by an even higher degree of technical guidance, as in them, members are most frequently drawn from the landless, and are, therefore, relatively unacquainted with the intricacies of farm management and accounting.

CHAPTER V

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, DELHI, FOR THE STATES OF U.P., PUNJAB & DELHI

The Delhi Agro-Economic Research Centre made a study of the programme in the states of Uttar Pradesh and Punjab and in the Union Territory of Delhi. In total, 34 cooperative farming societies were studied. These included 26 joint farming societies and 1 collective farming society organised in 9 pilot projects and 6 joint farming societies and 1 collective farming society organised in non-pilot areas.

5.2. State-wise, the number of societies studied was as follows:

State	Joint Farming Societies		Collective Farming Societies		Total
	Pilot	Non-Pilot	Pilot	Non-Pilot	
1	2	3	4	5	6
Uttar Pradesh	13	3	1	1	18
Punjab	11	2	..	..	13
Delhi	2	1	..	..	3
TOTAL ..	26	6	1	1	34

5.3. Most of pilot project societies had functioned for only a year at the time of the survey. Therefore, whilst broad indications regarding growth and development have been touched upon in the report of the Delhi Centre, detailed study of the performance of societies, over a period of time, could not be made. The report points to the difficulty in obtaining data regarding the performance of societies as production units, and states that its impressions regarding extra-economic aspects of the programme, *e.g.*, those relating to organisation, management and related social aspects, are based on firmer ground. The difficulty in obtaining reliable data from the accounts books of societies is also mentioned. Frequently, these books were incomplete. In addition, in Panjab, since the audit fee levied on societies is calculated as a percentage of the profits, data relating to production and expenditure was, in certain cases, faulty.

5.4. As the number of societies studied both in Uttar Pradesh and Punjab is large, and certain distinctive features can be observed in each State, for purposes of analysis, it will be convenient to examine, first, the 18 societies of Uttar Pradesh, second, the 13 societies of Punjab, and third, the 3 societies of Delhi.

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5.5. *Uttar Pradesh*—The societies studied can, broadly, be classified as follows:—

Type I—Societies formed of small and medium farmers, closely bound by ties of kinship and caste. These include 6 societies Rampur (1), Meerut (2), Fatehpur (2), Varanasi (1).

Type II—Societies formed by small and medium farmers belonging to diverse castes and kinship group. These include 5 societies Meerut (2), Gorakhpur (2), Varanasi (1).

Type III—Societies in which the initiative was taken by a dominant group of bigger farmers, the other members being small farmers or landless labourers. These include 3 societies Rampur (2), Meerut (1).

Type IV—Societies formed by large landowners, in order to defeat tenancy and land ceilings legislation. These include 2 societies (Fatehpur (1) and Gorakhpur (1).

Type V—Collective farming societies formed on lands that were formerly unreclaimed and under forest. These include 2 societies Fatehpur (1) and Gorakhpur (1).

5.6. The characteristics of these types, the leadership guiding them, their motivation, composition and performance are discussed below:

5.7. *Leadership Pattern*—The typological classification of societies throws light on the leadership. In the 11 societies of types I and II, economic necessity led to the formation of joint farming societies. The small and medium farmers were looking for a method of overcoming the difficulties implicit in marginal cultivation. Co-operative farming suggested itself as the technique. Towards this they were also guided by the advice of officials of the department. This combination of local initiative, backed by official encouragement, created the potential for development along sound lines. In most of these societies one or two members were particularly respected and they guided the others. In certain cases as in Fatehpur and Varanasi other non-officials also supported the programme. Thus, in Fatehpur district, three teachers of a higher secondary school actively helped in the formation of societies in their respective villages. Their enthusiasm encouraged not only the members of the societies but also the farming inspectors posted in the area. In Varanasi, workers of the Gandhi Ashram came forward to propagate the programme. In Meerut, the local Block Development Officer assisted the small farmers both in the initial organisation and in the subsequent activities of the societies registered.

5.8. The studies, therefore, indicate that promising leadership can come from within the ranks of small and medium farmers. If they are encouraged by other non-officials and officials, they can organise societies with significant demonstrational effects.

5.9. In the societies of type III, the leadership was different. In each case, the lead was given by a group of bigger landowners at, the time of organisation and cultivators were also included. However, none of these societies was working satisfactorily. In two of them, the bigger landowners had ceased taking any active interest in cultivation,whilst in the third, the uneasy balance between the big farmers and others broke down on the question of work distribution.

5.10. In 2 societies of type IV, formed to avoid tenancy and ceilings legislation, the initiative was taken by former zamindars, who were interested in cooperative farming only as a means of achieving this end. 1 of the collective farming societies (Type V) was also formed with a similar motivation. The other collective farming society, however, registered in 1952, has served as an example in this area. Its leadership has been chiefly provided by a group of ex-servicemen.

5.11. To sum up, the studies point to the growth of promising leadership in the 11 societies of types I and II and in 1 society of type V. Whilst the former societies were organised at the initiative of small farmers who were encouraged in their efforts by others, the latter society drew its robust leadership from a group of ex-servicemen. Nowhere, however, can it be said that, the programme received the organised backing of any political party. On the contrary, both in Meerut and Gorakhpur, hostile political propaganda threatened the programme.

5.12. *Membership: Identification with society and motivation*—Here again, the typological study of societies reveals interesting data. Illustrated from the case studies, the following facts are significant.

5.13. In Meerut, there are 2 societies of type I. In one of them, there are 17 members who have pooled their entire holdings totalling 80 acres. They have also pooled all their agricultural implements though bullocks are retained by them and hired to the society. All the members belong to the Gujar community, 5 of them are inter-related and a total number of 11 households have come together to form a society. 16/17 members participate actively in farm operations. The 1 non-working member is a woman. In the other society, 15 members have fully pooled their holdings totalling 50.54 acres. In addition, they have pooled 6 pairs of bullocks, 2 male buffaloes and a camel. Some agricultural implements have also been pooled. 14 of the members are Gujars and 1 is a Harijan. The Gujars belong to 3 different but inter-related families. 12/15 members work on the farm. The non-working members are 2 women and 1 minor.

5.14. In Fatehpur, similarly, there are 2 such societies. In one, 13 members of the Sayyed community have pooled 102 acres owned by them as also their livestock and implements. In addition, there are 6 landless Harijan members. 8 members are related whilst 11 are unrelated. 16/19 members work on the farm; 2/3 non-working members do not reside in the village. In the other society, 16 members of Kurmi community have come together, pooling 62 acres. These include 10 acres of garden land and 12 acres of cultivable waste. Livestock and most of the important agricultural implements are pooled in the society. 8/16 members are related (5 landed and 3 landless). All 16 members work on the farm.

5.15. In Rampur, where one society of this type has been formed, 15 members have pooled their entire holding of 141.59 acres; they all belong to the Jat Sikh community. 11 members are inter-related, belonging to 3 distantly related family groups. All the draught cattle and major implements owned by the members have been pooled. All the members work on the farm, except one, who resides elsewhere. In Varanasi, too, a society of this type was formed in 1958 by 24 farmers of the Kurmi community. They pooled 57.33 acres owned by them and all, except 4 absentees worked on the farm. At the time of the survey, however, the members had reverted to individual cultivation.

5.16. To summarise, in the 6 societies of type I, there was a high degree of identification with the society. Members were motivated by a common desire to improve their agricultural production and living standards by pooling their resources. They found it practicable to do so, by joining forces with others who belonged to a similar social and economic status. The case studies specifically indicate that in 2 societies of Meerut and 1 society of Rampur, the entire land of individual members was pooled. As regards the other societies, the exact position in this regard is not indicated. In each case other assets were also pooled—in certain cases, the pooling of bullocks, implements and irrigation wells was complete. Most of the members personally worked on the lands of the societies. Non-working members were few. In 5/6 cases, the members were enthusiastic about their prospects and the societies were also drawing favourable reactions from non-members. New societies were coming up as a result of their demonstrational effect. Only 1 of these societies had reverted to individual cultivation. The reasons for this will be examined when dealing with performance of these societies.

5.17. The societies of type II may now be considered. The motivation in forming these societies was similar to that leading to formation of society of type I.

5.18. In Meerut, in one society of this type, 18 members had pooled 75 acres and occupied a further 60 acres belonging to the gram sabha. Livestock and implements were either pooled or owned by the society. Whilst the members belong to 14 families and 7 castes, 6 families are interrelated. 12/18 members work on the farm, whilst 5 members do not reside in the village. The lands of the society are largely alkaline. Since 1957 efforts were being made to reclaim them. However, the resources and man-power required were beyond the capacity of any individual. The society, was, therefore. registered in June, 61, the various families concerned feeling that this was the only way of stepping up production in this area. In the other society of this type is Meerut, 21 members pooled 50 acres. They belonged to 18 different families, but after one crop, they reverted to individual cultivation. It is significant that only 10 members worked on the farm. 11 were absentees. Disputes arose when the secretary of the society decided to purchase a tractor from out of the loans received by the society—the majority of members felt there was no need for a tractor owing to the limited size of the society. In addition, the difficulties were accentuated by the absence of consolidation of holdings the lands of the society were in 49 plots.

5.19. 2 societies of Type II were studied in Gorakhpur. In one 22 members, belonging to 6 different communities and 12 families pooled 57.20 acres. 10 members, belonging to 2 family groups, were interrelated, 16/22 members resided in the village, whilst 14 of them participated in farm operations. In the other society 15 members, each from a separate family and representing 4 communities, pooled 50.3 acres. However, the case study indicates that only a few members took an active interest in work on the farm. Disputes also arose regarding irrigation problems—the lands of the society were scattered that full benefit could not be gained from the pump set purchased by the society. In the absence of consolidation of holdings, it appears difficult for the society to function.

5.20. The one society of this type studied in Varanasi also experienced serious difficulty. Formed by 17 unrelated members who pooled 63 acres, the society comprised both Thakurs and Ahirs. After a year, a contest arose between these communities for the presidentship of the panchayat. The antagonism generated effected the society, with the result that the Thakurs, who owned 2/3rd's of the pooled land, withdraw their share. Whilst the Ahris are still determined to run the society efficiently, even in its truncated form, it is obvious that the society cannot function effectively.

5.21. As may be seen from this, the members of the societies of type II, drawn together by common economic problems, fell apart more easily under the stress imposed by various factors. 2/5 of these societies were functioning confidently, whilst the remaining 3 had not endured. It is significant to note that member participation was generally less in these societies, when compared to those of type I. Where the number of non-working members was relatively high, the process of disintegration worked faster.

5.22. 2 societies of type III were studied in Rampur and 1 in Meerut. In Rampur, one society had 15 members, 14 of whom had pooled 488 acres. 1 member was landless. The members who were Sikhs and Muslims, were drawn from 10 households. In actual fact, the idea to form a society was mooted by two brothers who were unable to cultivate their lands satisfactorily, having business in other areas. Along with some friends, who were also substantial farmers, they formed a society. Whilst, theoretically, all 488 acres were pooled, in practice only 80 acres were jointly cultivated. Only 1 of the members supervised work, actual operations being undertaken through hired labour. The other resident members were more interested in the areas retained for individual cultivation. This society is more a union of landlords and member-identification with the society is negligible. Similar characteristics exist in the other society of this type in Rampur. It has 11 members, 8 of whom are related. None of these 8 work on the farm, 4 are actually non-resident. The remaining 3 members, who own only 3.70 acres, work on the farm. 8 non-working member own 260 acres. However, they have pooled only 44.45 acres in the society and leased a further 80 acres to it. The rest of the land is cultivated individually. As is to be expected, there is little sense of cohesion amongst members; the society receives little of their attention and, latterly, disputes amongst them have further affected the working of the society.

5.23. In the Meerut society of this type, the membership is less conspiciously heterogeneous. 15 members have pooled 80.15 acres. However, of them, 2 members have pooled 41.94 acres and the remaining 13 have pooled 39.21 acres. The members are all Jats; 6 of them are inter-related. Whilst members worked on the farm, they depended more on hired labour. After six months of functioning, the society was riddled with quarrels between the various families and disputes regarding the methods of work allotment. For all practical purposes, it had ceased functioning as a joint cooperative farm.

5.24. As is evident from this, in each of these three societies, the heterogeneous quality of the membership, based on an uneven partnership of big and small farmers, worked poorly. There was neither loyalty to the society, nor a desire to make it work efficiently. Member participation, in all cases, was deficient.

5.25. The 2 societies formed to avoid land reforms legislation, illustrate a complete lack of sympathy between the landowning members and those who actually work on the farm. In Fatehpur, some businessmen, who owned 550 acres, were getting the land cultivated through tenants on a share-cropping basis; in Gorakhpur, a former zamindar, who had parcelled out his land to avoid ceilings legislation, was having 71 acres of this land and 24 acres of temple-land cultivated through tenants and hired labourers. Only 4/15 members worked on the farm—these included 3 former tenants and 1 member who manages the farm. The rest are absentees. In no way do these 2 societies represent the real purpose of cooperative farming.

5.26. The 2 collective farming societies of Rampur (Type V), illustrate certain diametrically opposite characteristics. Whilst in Dhruv society there are 46 members, belonging to 7 communities, in Deepak society there are only 16 members, the dominant group of 6 being closely inter-related. Both societies were formed on lands that were formerly covered by forest. The area of the former society is 325 acres whilst that of the latter is 250 acres. However, whilst the former society, led by a group of ex-servicemen, has opened its membership to others, according to the requirements of its schemes of development and production, the latter has remained closely restricted. Thus, whilst members of the managing committee of the former society belong to different families, in the latter, a single family provides the president, secretary and manager. In both societies, the number of non-working members is large. Thus, 25/46 members of the former society do not work on the farm; of them, 14 do not reside in the area permanently. In the latter, 7/16 are absentees. However, the motivation of the two societies being different, it is significant that the absentees of the former society include those serving with the armed forces, whose families stay behind on the farm, whilst in the latter case, the absentees include members of the dominant family group. These differences are reflected in the working of the societies and in the facilities which they offer their members.

5.27. This study of the composition of societies, therefore, illustrates the highest degree of cohesion and member-participation in the societies of type I. In those of type II, inspite of many common bonds between members, fissiparious tendencies manifested themselves in 3/5 societies. In the societies of type III and IV, members lacked a common outlook. One of the societies of type V showed a high degree of cohesion and partnership. The other, whilst functioning efficiently, was dominated by a single family.

5.28. *Agricultural Production*—Whilst the case studies of the Delhi Agro-Economic Research Centre briefly mention the crops grown, yields per acre and improvements made on the farm, comparative data regarding production, in its various aspects, before and after organisation of the societies, are not available. Nor has any comparison been made with the performance of individual cultivators of similar status in the area. Within these limitations, however, the material available in the case studies is analysed below:—

5.29. (*i*) *Increased Irrigation*—Many of the societies studied gave high priority to improving their irrigation facilities. Despite difficulty in obtaining finance, of the 6 societies of Type I, two had bought pumpsets, one had constructed 3 masonary wells, and another had purchased pipes to ensure better irrigation. Similarly, of the 5 societies of type II, 3 had taken steps to increase irrigation. 4 pumpsets had been purchased by these societies. Of the 3 societies of Type III, 1 had acquired a pump set. No information is available regarding the societies of Type IV. Of the 2 societies of type V, Dhruv society had achieved good results. It had constructed 2 tube wells and purchased 1 diesel engine.

(*ii*) *Land Improvement*—The studies indicate extreme difficulty in obtaining long and medium term loans for land improvement. Generally, assistance for this purpose was limited to the amount of Rs. 4,000 made available by the government under the Cooperative Plan. In addition, schemes for land development were impeded by uncertainty regarding the areas finally to be allotted after consolidation of holdings. This was particularly noticeable in Meerut and Fatehpur, where the societies formed by small farmers were faced with this difficulty. As is to be expected, therefore, land improvement measures were undertaken chiefly where doubts of this nature did not exist. Santosh society of Rampur (Type I), has worked hard to improve its land. Its total area of 141 acres has been reclaimed from forest, 85 acres have been levelled and bunding has been undertaken for 100 acres. Similarly, the two societies of type III situated in this district, had levelled 80 and 60 acres each. The Dhruv society owned 325 acres. In 1952-53 only 96 acres were cultivated. Thereafter, by 1958-59, the area sown increased to 283 acres. The land was cleared of forest, 155 acres were levelled and bunding was undertaken for this area. In the case of Deepak society, since 1952, the total cultivable area of 233 acres owned by the society, has been gradually reclaimed. It is significant that none of these societies had received any long or medium term loan from cooperative financing agencies. Invariably, they had to depend upon their own resources for this work.

5.30. In Meerut district as mentioned earlier, one society of type II was specifically formed with the intention of reclaiming alkaline land. The members had, individually, been trying to improve this land since 1957. Where they had not succeeded, the society had, in the brief period of its existence brought under cultivation about 35 acres of alkaline soil by intensive green manuring, use of farm manures, chemical fertilizers and careful irrigation.

5.31. (*iii*) *Improved Practices*—The case studies offer little information regarding the details of inputs before and after formation of the societies. Data regarding agricultural practices, cropping changes etc. are also not generally available. Whilst further information on these points may be gathered in a subsequent round of studies, on the basis of the existing data, the following facts emerge.

5.32. Information available regarding 2/6 societies of type 1 indicates that both introduced various improved practices. In one, sugarcane was sown on 2½ acres which were carefully ridged and furrowed, wheat and gram were sown in lines in 80 acres, paddy was transplanted in 85 acres. In the other society, the practice of dibbling was undertaken for wheat cultivation and the Japanese method of paddy cultivation was also followed.

5.33. For the societies of Type II, information is available regarding 2/5 societies. Both these societies were also adopting the improved practices referred to in the proceeding paragraph. As indicated earlier, the remaining three societies of this type were experiencing serious difficulties in management owing to disputes amongst members fragmented holdings etc. No data have been provided regarding the 3 societies of type III. In view of the fact that they were not functioning well, however, it appears unlikely that they had adopted any improved practices. The same conclusion may be drawn regarding the 2 societies of type IV.

5.34. As regards the two collective farming societies, the case studies indicate that they were using a wide range of improved practices. Both were equipped with tractors and were using modern implements. Improved seeds and fertilizers were being widely used and better agricultural practices such as line sowing, Japanese method of paddy cultivation etc., were being followed. Dhruv society, in particular, had a scientific approach to agriculture.

5.35. (iv) Productivity: In the case of only 5 societies has an estimate been made of the value of gross production, or per acre productivity, for a period of over one year. Thus, Rampur society (Type I) had a gross production valuing Rs. 13,394 in 1961-62, in 1962-63 it fell to Rs. 7,428. The reason attributed for the decline was the occurrence of serious floods in the latter year. In Barbatpur society, (Type II), on the other hand, gross production valued Rs. 14,240 in 1961-62 and rose to Rs. 14,600 in 1962-63. The value of per acre production increased from Rs. 180 to Rs. 194, during this period. Kiran society (Type IV), indicated a declining gross production from Rs. 9,153 in 1961-62 to Rs. 6,720 in 1962-63. In Dhruv society (Type V), gross production valued about Rs. 70,000 in 1959-60 and per acre production valued Rs. 162 they rose to over Rs. 75,000 and Rs. 199 respectively in 1961-62, but declined to about Rs. 50,000 and Rs. 147 respectively in 1962-63. The reason attributed was the failure of the monsoon during 1962-63. Deepak society (Type V) witnessed an increase in the value of gross production and per acre productivity from Rs. 25,115 and Rs. 150 in 1958--59 to Rs. 65,807 and Rs. 205 in 1961-62.

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5.36. Data for the single year, 1962-63, are available in respect of 4 societies. In Chandpuri society (Type I), the per acre value of productivity was Rs. 325 this was the highest for all the societies studied in this state. In Santosh and Meerut societies (type I), the value of productivity per acre was estimated as Rs. 161 and Rs. 171 respectively. In Levanagari society (Type II) productivity valued Rs. 183 per acre.

5.37. No information is available regarding the remaining 9 societies studied.

5.38. (*v*) *Farm Management*—The formation of a society led to reduction in the number of plots. In Meerut district, one society having 29 plots, was consolidated into 1 block. Another society, having 19 plots had already been consolidated into 1 block. Similarly, in Fatehpur, both the societies of type I studied there, had their lands available in 1 block each after consolidation proceedings.

5.39. At the time of the survey, consolidation of holdings proceedings were being undertaken in many of the areas in which societies were located. As no formal instructions had issued to the consolidation staff to treat the lands pooled in a society as a single unit, at times great difficulty was experienced. Thus, in one case, the lands of a society became discontinuous as a non-member was allotted a plot within the area of operation of the society. In areas where consolidation was yet to take place, farm management was rendered difficult. At times, the difficulties of management were so acute that the societies reverted to individual cultivation *e.g.*, two societies of type II, formed by small farmers, broke up because it was possible to supervise work, arrange for irrigation, or invest in the land, owing to the scattered nature of the holdings. One of these societies had as many as 49 fragments.

5.40. It is significant that in most of the societies where consolidation had been effected, work squads were being organised and supervision was more effective. In the 'tarai' area, where fragmentation is not yet a wide-spread problem, similarly, management was easier, and the system of work squads widely prevalent.

5.41. The study indicates that Dhruv society had given serious thought to the question of incentives for good work. In this society, the total working force has been divided into 3 squads, each headed by a group-leader who assigns and supervises the work of his group. Members are paid monthly salaries according to the scales fixed for different types of work. In addition, a daily assessment is made of the quantity and quality of work of each member. The daily work-rating of individuals is taken into account whilst distributing the yearly work bonus. In 1961-62, 25 per cent of the net profits, amounting to Rs. 4,286 was distributed as wage bonus.

5.42. *Employment*—As indicated earlier, member-participation in the working of societies was generally high in societies of types I and II. In Dhruv society (Type V), where large scale land improvement measures were undertaken, the various schemes for this purpose also generated employment. By and large, however, it can be said that the societies did not face the problem of providing full employment to members adequately. Apart from work in agricultural operations on the farm, few societies undertook subsidiary activities. When the size of the farm is related to membership, the need for subsidiary occupations becomes evident. Thus, for the societies of type I, the average size was 81.5 acres and the average membership was 18. For the societies of type II, the average size was only 59 acres and the average membership was 19. Yet, of the societies of these types, only 2 are reported to have taken up subsidiary activities. One society was maintaining 7 buffaloes—income reported from the sale of milk was Rs. 1,260 in 1962-63. The other society was also keeping some milch cattle and running a 'kargha' industry. However, owing to the non-viable scale of the activities undertaken, returns were very low and both activities were now being abandoned.

5.43. In the societies of types III and IV, whilst the land-man ratio was clearly more favourable for full employment to members, the nature of membership itself left much to be desired. As a result, there was heavy reliance on non-members for day-to-day work on the farm. None of these societies had taken up any activities allied to agriculture.

5.44. Deepak collective farming society shared, in this respect, the characteristics of the societies of types III and IV. Thus, of the total wages paid in 1962-63, 63 per cent. went to non-members. Dhruv society, on the other hand, provides an example where a serious effort has been made to diversify the employment opportunities of members. Though the case study does not go into details of the number of working days of each member, certain other relevant data is provided. Thus, the society is running units for dairying, poultry keeping and piggery. It also operates a saw mill and a flour mill. The dairying and poultry units are on a small scale—the products chiefly being consumed by members and their families, to whom they are sold at concessional rates. Piggery was taken up only in 1962-63, though there are plans to develop it on commercial lines. Small profits, amounting to Rs. 442 and Rs. 649 were made during 1962-63 from the saw and flour mill respectively. The income of the society from sources other than cultivation amounted to Rs. 358 in 1961-62 and Rs. 1,277 in 1962-63. As regards the income accruing to members and their families, this amounted to 33.3 per cent and 52 per cent of the gross income in 1961-62 and 1962-63 respectively. The per annum income for an individual member was Rs. 700 in 1961-62 and Rs. 773 in 1962-63. It is significant, however, that membership was 55 in 1961-62 and 46 in 1962-63.

5.45. The case studies, therefore, make it clear that the cooperative farming societies must also undertake activities other than cultivation. Hitherto, little has been done in this direction. Even where societies have taken up various agro-industries, they have generally been on a small, non-viable scale, catering in a limited way to the consumption needs of members and their families. It is, therefore, necessary that schemes both economically and technically viable, be worked out for such societies. These schemes must be related to the resources and skills of the members and finance made available wherever necessary. In addition, if these schemes are to prove economically worthwhile, they must be related to the wider aspects of marketing and development in the area.

5.46. *Financial Assistance*—The case studies indicate that, generally, societies have received financial assistance according to the pattern formulated by the Government of India. However, additional assistance from the various developmental departments and the cooperative financing agencies, has not been adequate. Separate figures relating to the assistance provided from each of these sources is not available in the case studies. However, it is evident that short-term finance on the basis of production plans was rarely given; medium and long-term loans from cooperative agencies were totally inadequate. As such, the societies had to depend more on their own resources. Where it was not possible to raise these (as in some societies of types I and II), work suffered.

5.47. Of the societies studied, Dhruv society alone received comprehensive assistance from the cooperative bank, block, animal husbandry and cooperative departments and the cane development union. This was largely because of the quality of its own leadership. Whilst the total quantum of loans and subsidies provided have been indicated, neither the duration of the loans nor the purposes for which the assistance was given and utilized are explicitly mentioned.

5.48. *Returns to Members and Distribution of Profits*—The case studies illustrate that a variety of practices are being followed in the distribution of income. In the societies of type I, generally, about 70 per cent of the gross income of the society went to members and their families. Thus, in one society of Meerut, out of this amount, 24 per cent went in to members as remuneration for work, 20 per cent as return for ownership of land, 25 per cent as hire charges to members for use of their cattle, and the remainder as dividend on shares. In one society of Fatehpur, out of 70 per cent of the gross income going to members and their families, 66 per cent went as remuneration for work, 25 per cent as dividend on land and the remaining amount was distributed as work bonus and dividend on money shares. In Santosh society of Rampur, 63 per cent of the net income went to members and their families. Of this, 73 per cent constituted remuneration for work and 27 per cent hire-charges for implements. Significantly, no land dividend at all was paid.

5.49. In one of the functioning societies of type II, only remuneration for work done was given to members. 41 per cent of the gross income was distributed in this way. No return on land was paid. In the other promising society of this type, 48 per cent of the gross produce was earned by members (half as remuneration for work and work bonus, and half as land return).

5.50. The studies, therefore, indicate that in the societies of small farmers, return for ownership of land was generally restricted to less than 25 per cent of the gross income. In certain cases, it was not given at all. A high percentage of the gross income of the society went as remuneration for work to members. In so far as this reflects reliance on the labour of members (rather than on hired labour), it is a healthy sign.

5.51. In contrast to the societies of types I and II, the distribution of income in the societies of types III and IV leaves much to be desired. Though full details are not available, it is clear that a high percentage of the gross income went to casual labourers. In one case (type IV), the produce was share-cropped between the 'tenant' members and the land-owners. In another case, most of the produce was given as 'advance' to certain members.

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5.52. Of the collective farming societies, Dhruv society had done well in building up its resources. Between 1952-53, it has created assets valued at Rs. 1,04,094.75. Rs. 64,000 or 62 per cent of these assets are invested in power driven implements—tractors, tubewells, etc. These and the other assets, such as residential and non-residential buildings, livestock, etc., all belong to the society. Other aspects relating to the income distribution of this society, have been referred to earlier, whilst dealing with the subject of employment on the farm.

5.53. *Technical Guidance*—In Uttar Pradesh, a Deputy Registrar and an Assistant Registrar at the State-level, work exclusively for the cooperative farming programme. The field staff of the Cooperative Department, therefore, get useful guidance and assistance. At the divisional level, the Deputy Registrars are assisted either by an Assistant Registrar (Farming) or by a Regional Senior Farming Inspector. Similarly, in those districts where the Assistant Registrar was helped by a Senior Farming Inspector, the work relating to the programme was better coordinated. At the block level, however, arrangements varied in quality from project to project. Thus, in Meerut, where the project was in Meerut block itself, the Senior Farming Inspector stayed in the city. In Rampur and Gorakhpur, where the project covered 2 blocks in each case, the Senior Farming

Inspector actually stayed at district headquarters. In Fatehpur, on the other hand, the Senior Farming Inspector stayed in the Tehsil headquarters around which the societies were formed. In Varanasi, where the project covers two blocks, his headquarters were situated in one of the block offices.

5.54. The studies indicate that, generally, the field staff of the cooperative department had some understanding of the objectives of the programme.

However, at the block level, there was need for greater coordination with the block agencies. Only in Meerut it was found that the Block Development Officer took an active and continuing interest in the programme.

5.55. Indeed, inspite of formal instructions from Development Commissioner regarding assistance from the various departments, in actual fact, much remains to be done. The district level technical officers rendered only nominal guidance to the programme. In certain cases, departmental policy actually places cooperative farming at a discount. The difficulties regarding consolidation of holdings have already been mentioned. In addition, it was found that the Canal and Cane Departments did not recognise the cooperative farming societies as single cultivating units. As a result, the schedules for water distribution, and schemes relating to cane cultivation, frequently worked against the programmes formulated by societies.

5.56. Three other points may, briefly, be mentioned, as they have been thrown up by the case studies:

(a) There was a marked difference in the quality of pilot and non-pilot societies. It is evident that, unless proper arrangements are made for the supervision of non-pilot societies, they will be defective and, at times, a positive discredit to the programme. Both the societies of type IV were formed in non-pilot areas. Deepak collective farming society (type V) was also a non-pilot society. Whilst working effectively, its membership composition left much to be desired.

(b) 11 societies were formed by small and medium farmers. However, 1 of type I, and 3 of type II, had run into serious difficulties. At times, these difficulties arose from complicated problems of management, *e.g.*, when the holdings were badly scattered; but in certain cases, the problems could have been resolved with prompt advice from the official staff *e.g.* when a dispute arose regarding the purchase of a tractor. In one society of Varanasi, which had been functioning promisingly for 2 years, management problems grew uncontrolable as the school teacher, who acted as Secretary of the society, could not devote adequate time to its affairs.

(c) This leads on to the need for properly trained secretaries and managers. In particular, accounting and management procedures need to be improved. Greater guidance is indicated from the field staff for this purpose.

(d) Finally, the studies indicate that prompt action needs to be taken to de-register societies that are either spurious or defunct. Where this is not done, their continuing existence as cooperative farming societies, ridicules the objectives of the programme.

PANJAB

The programme in Panjab has developed along lines that differ, in certain respects, from the broad guiding principles suggested for pilot projects. Thus, the report of the Delhi Agro-Economic Research Centre points out that, in many cases, the 'cooperative element' of the programme has received less attention than it should have received and that societies have been formed as the result of 2 or 3 cultivating units joining together, generally in order to preserve the interests of certain dominant families. Where this has happened, farm servants have been enrolled as landless members in order to satisfy the minimum membership required and to ensure adequate labour on the farm. At times, the wives and close relations of members have been added, to reach the minimum requirements of registration—such members had little to contribute to the society by way of land, labour or capital.

5.58. According to the report, almost all the societies case-studied have been promoted by economically resourceful and influential persons of the respective villages with a view to obtaining financial help from Government. In two districts covered by the survey *viz.*, Karnal and Jullundur, it is stated that eagerness to possess a tractor was the main motivating force leading to the organisation of societies.

5.59. Classifying the societies studied, the report places them in the following broad types:—

Type I—Societies dominated by the interests of a single family, included in this category are 3 pilot societies (Nanakpur, Vyas and Khushwant) and 1 non-pilot society (Shamnagar). Added to these is a pilot society described as a 'union of landlords' (Deshbhaghat).

Type II—Societies bringing together 2 main cutlivating units each. These include 4 pilot societies (Lassi Khana, Tandoori, Pandu and Rotipur). In one of them, though there are 6 cultivating units, only 2 had been pooled for joint cultivation. In addition, 1 non-pilot society was also included in this category (Gobindpur).

Type III—Societies bringing together 3 cultivating units each. These included 3 pilot societies (Badshahpur, Jiwan and Taravati).

5.60. The characteristics of these types are discussed below:

5.61. *Membership: Leadership, Motivation and Identification with Society*—The societies of type I may be divided into 3 sub-groups: those formed (a), to avoid ceilings and tenancy legislation, (b), to preserve and improve the cultivating strength of a single dominant family and (c), by non-working 'landlords'.

5.62. To sub-group (a) belong the non-pilot society, Shamnagar, and the pilot society, Khushwant. Thus, in the former, one family group (comprising the President, his wife, two sons and mother) have pooled 195.6 acres out of the total area of 287 acres. The other 6 land-owning members are related to the dominant family. The remaining 8 members are landless, they worked as agricultural labourers for the President before the society was formed. Only 8 members (2 landed and 6 landless) worked on the farm. In the latter, a zamindar owning 48 acres was having his land cultivated through labourers. In order to secure financial assistance, he formed a society with the help of another family. Of this family, 1 member used to lease out his land formerly; 3 are still having their lands cultivated individually, though the lands are pooled in the society. Only 5/12 members worked on the farm in 1962-63. 3 belonged to the promoting family and 2 were landless Harijan members.

5.63. To sub-group (b) belong Nanakpur and Vyas societies. In the former, the President owns 83 acres. His brother's family (3 landowning members) own another 14½ acres. A fifth member has pooled 13 acres, which he used to lease out formerly. Two other members have been added, owning 0.25 and 3 acres respectively. The remaining 5 members are landless labourers. 2 members do not work on the farm, 3 supervise operations and the rest participate in farm operations. There is, therefore, a fair degree of identification with the society. This is also illustrated in the fact that members have pooled certain important assets *e.g.* bullocks, implements and a tube-well.

5.64. Vyas society poses certain interesting data. There are 15 members, of whom 14 reside in the village and 1 has gone to England. 9 own land and 6 are landless. The landed members belong to Kamli Sikh community. 6 of them belong to one family (a father and 5 sons). They contribute 54 acres out of the total 67.5 acres pooled. The other 3 land-owing members are unrelated. Of the 6 landless members, 2 are wives belonging to the sons of the dominant family. The report of the Delhi Centre, therefore, holds that there are 4 cultivating units, though the society is dominated by one family. Here, however, additional data collected regarding this society illustrate an interesting point. The father of the dominant family owns 31½ acres and his 5 sons own 4½ acres each. The father is now advanced in age and 2 of his sons maintain separate households. Prior to the organisation of the society, it was being experienced that the holdings of the family were not being cultivated to maximum benefit. In particular, the two sons who had separated, were experiencing difficulty. The family was motivated, therefore, by the keen desire to revive the joint management of its lands and to prevent the deterioration in production that was resulting from the separation of the sons. The agricultural performance of the society, which has been remarkable, will be considered later. As regards work on the farm, whilst the 3 land owning members belonging to the unrelated families did not participate, all others joined in farm operations. Thus, in 1962-63, all the work was done through members, except during harvesting, when 32 man-days were provided by casual labourers.

5.65. Deshbhaghat society (sub-group c), may now be considered. Prior to its registration as a joint society, its members had organised a better-farming society. They had felt the need for machinery, and latterly, for a better use of the limited labour supply of their families. The society has 12 members, all are Jat Sikhs. Ten members own land, two are landless. The report of the Delhi Centre states that 5 members, (All landowning), belong to 1 family, another 5 members (3 land owning and 2 landless) belong to another family, whereas 2 other landowners are unrelated. In 1962-63, only 5 members worked.

The report, therefore, concludes that member-participation was negligible and that work was undertaken through hired labour. It also observes that most of the members are too old to work on the farm and that some of their close relations were remitting considerable amounts from abroad. To this extent, the society was more like a union of landlords rather than an effort in cooperation amongst real cultivators.

5.66. Additional data gathered, however, permits a further insight into the character of this society and of the village in which it is situated. In recent years, there has been considerable emigration from certain districts of Punjab to England. America and Canada. This process has been most marked in Jullundur district. The emigrees do not, always, belong only to the affluent families of the rural area. Thus, from Deshbhaghat village, a large number of Harijan families, too, have sent their members abroad. The process of raising funds for this purpose, ensuring employment abroad, etc., has become a highly organised concern of the local community. The members of the cooperative farming society, represent and reflect the conditions of the areas in which they live, they are not exceptional. Indeed, one member, who owns only 3 acres, has also sent his son to England. Resulting from this emigration and the opening provided for employment in the armed forces, in certain villages of this area, landowning families experience a definite shortage of labour.

5.67. This becomes more pronounced when the landowners are, themselves, advanced in age—as in the case of Deshbhaghat joint farming society. Even so, it is significant that in the year 1962-63, out of the total wages paid for work on the farm, Rs. 1,180/- went to members and their families and Rs. 936/- to non-members. Between July 1964 and April 1965, Rs. 548 had accrued as wages to members and only Rs. 229/- to non-members. Two other facts are important in considering the nature of this society; firstly, whilst it is true that 4 families have provided the land, the number of independent households is 10—all the landowning members having their own families and maintaining individual kitchens and household effects. Secondly, against the total area of 60 acres owned by members (all of which is fully pooled in the society), the maximum held by any one member is 9½ acres. The average pooled, per landowning member, is 6 acres. To this extent, it is evident that the members are medium cultivators and not large landowners.

5.68. The issues posed by Deshbhaghat society have been indicated at length because of the variety of reasons motivating the members. Most important, however, the society draws attention to the 'cultivating household' as a unit of membership, rather than the 'family'. The working of the society also exhibits the harmony resulting from a group of brothers and old friends joining together.

5.69. This distinction between the 'cultivating household' and 'family' assumes primary importance when studying the various societies of types II and III. Broadly, a distinction must be drawn between societies formed by 'undivided families' and those formed by independent cultivating households (even though they belong to a common family). The motivation guiding the members can then be of various kinds *e.g.*, to avoid ceilings or tenancy legislation, to avoid the sub-division of a family farm, to bring together family units that have separated in order to improve production, or to obtain financial assistance.

5.70. Of the 5 societies of type II, Lassi Khana comprises 2 families. A Jat Sikh family has enrolled 10 members, 7 owning land, (3 brothers and 4 sons of the fourth brother), and 3 landless (sons of the first 3 brothers). A Saini Sikh family has provided the remaining 4 members, 2 owning land (2 step-brothers) and 2 landless (their sons). The families have pooled their lands fully, each family having contributed about 32 acres. Details are not provided concerning whether the brothers of each family are maintaining separate households. The case-study, however, states that the related nature of the membership should not be treated so as to consider the society merely of two families, because both families are big and as many as 10 of their members are working on the farm. The members have a high degree of identification with the society; they were motivated by the need of joining together to step-up production. The society has drawn favourable response in the village and is working in harmony.

5.71. Tandoori society had a similar membership of medium cultivators. 2 Jat Sikh families each enrolled 6 members (including 1 woman each). One family pooled 45 acres and the other 29 acres. Draught cattle and implements were also pooled. No details are available regarding the number of independent households involved. In 1962-63, 9/12 members actively worked on the farm; though differences led to individual cultivation in 1963-64, in 1964-65, the members were keen on starting joint cultivation again. The motivation behind the society was to increase production through a better use of resources.

5.72. Pandu society, in contrast, was motivated by a desire to obtain financial help from government. 2 Jat Sikh families joined together, pooling 32 and 8 acres respectively. Of the 12 members, 4 are non-resident. Joint cultivation was not being practised.

5.73. Gobindpur society has a heterogeneous membership of 14. In actual fact, the families of the President and Managing Director, (who is also a director of the Jullundur Central Cooperative Bank) dominate. These two families are, themselves, inter-related. Of the total area of 140 acres pooled, the President, his wife and son have contributed 70.5 acres, and the Managing Director, his wife and son, have pooled 43 acres. 10 acres have been pooled by 3 non-resident members, whilst 15.50 acres have been pooled by 6 other members. Of the 7 Jat Sikhs, (all pooling land), 4 belong to the 2 dominant families, whilst 3 work only part-time on the farm. The 3 Khatri members are non-resident and interested only in their land-share. All the 4 Harijan members, (3 own 1 acre each and 1 is landless), work on the farm. The society has been functioning efficiently since 1957.

5.74. Rotipur society has also been included in this type, as in 1962-63, only 2 out of 6 cultivating units were being jointly cultivated. Though the members were motivated by a desire to pool their labour and resources in order to improve production on their lands, in 1962-63, only 5 members received wages from the society, the rest continuing to work on their own lands. Additional data collected, however, illustrate the direction in which this society has progressed.

Out of the total membership of 12, there are 7 land-owning members who have together pooled the entire 74 acres held by them. 10 acres have, in addition, been taken on lease. These 7 members belong to 5 distinct families all being Jat Sikhs. 4 unrelated landless members have also been enrolled *i.e.*, 2 Jat Sikhs and 2 Harijans. Since 1963-64, all the lands are being jointly cultivated. The members indicated that it took them a full year to transform their operations from better farming to joint farming. Thus, whilst in 1962-63, 5 members earned Rs. 3,000/- as wages, against Rs. 1,632 paid to casual labourers, in 1963-64, 8 members earned Rs. 6,050 as wages, only Rs. 1,740 being paid to non-members. In addition to these 8 members, 2 wives, who are also members, worked and were paid during the cotton-picking season. There are, therefore, only 2 non-working members—of whom one has gone to England. At present, there is a high degree of member-identification with the society. The case-history of this society illustrates that, in certain cases, the development from individual to joint farming can proceed by stages. This needs to be taken into consideration when assessing the character of a society.

5.75. The societies of type III may now be considered. All 3 are situated in Karnal. In Badshahpur society there are now 14 members —6 landowning and 8 landless. Of the 6 landowning members, 4 are brothers contributing 48 acres. In addition, the society has taken on lease 32 acres belonging to the mother and another 2 brothers of this group. This family, therefore, controls 80 acres out of the total area of 155 acres. The remaining land belongs to 2 members (64 and 11 acres each). All the land owning members belong to the 'road' community, the landless members belonging to 3 different communities. 10/12 members actively work on the farm. Of the 2 absentees, 1 is a student and the other is in service. It is evident that the brothers came together in order to render possible the continuing joint management of their lands. Member-participation in the working of the society is. therefore, high. The case-study does not indicate whether the brothers are maintaining separate households, nor does it mention the method of cultivation before the society was formed.

5.76. In the second society of this type, viz., Jiwan, all the land-owning members are also of the 'road' community. The total land pooled is 68.5 acres, belonging to 5 members from 3 families. 7 others have been enrolled, including 5 women who are related to the members. Details regarding the number of independent households are not available. In 1962-63, all members worked either full time or part-time on the farm. Thus, Rs. 3,427 was earned as wages by them again only Rs. 547 paid to casual workers.

5.77. In Taravati society, on the other hand, member-participation is less. Before formation of the society, the lands were being cultivated as 3 units, the 7 landowning members (all of the 'road' community) belonging to 3 families. 6 landless members (2 being related to the landowning members); have also been added. Of the 13 members, 9 work on the farm. Whilst, in 1962-63, all the 132.75 acres pooled, were jointly cultivated, members earned only Rs. 5,394 as wages, as against Rs. 5,321 paid to non-members. The case-study indicates that, despite the restricted membership, disputes were arising amongst the 3 landowning families.

5.78. To summarise, this study of the membership and motivation of societies draws attention to the following important characteristics of the programme in Punjab:—

(i) In most cases, a limited number of landowning families have joined together. To reach the minimum number of 12, they have, at times, enrolled their wives and agricultural labourers as members.

(ii) However, for a clearer assessment of the motivation guiding members, consideration must also be given to the 'cultivating household' as a unit of membership, in addition to the 'family'.

(iii) This is particularly so as, in many cases, the societies have been formed by medium cultivators who were keen to hold together, and cultivate more efficiently, the lands belonging to individual family members.

(iv) In only 2/13 societies studied was an attempt made to circumvent land reforms legislation. In both these societies, member-participation in farm operations was scant. As regards the other societies, in only 2 was the remuneration for work paid to members and non-members approximately equivalent. In the others, that were cultivating jointly, even where all the members did not work on the farm, a large percentage of the remuneration for work earned accrued to the working members and their relations. Non-working members were either too old to participate, or they were women, emigrees, or employed outside the village.

5.79. *Agricultural Production*—The performance of the societies in regard to agricultural production may now be considered:

(i) *Increased irrigation*—Of the 5 societies included in type I, data available regarding 3 societies, indicate that one purchased a pumpset and another re-bored a 2½" tube-well to fit it with a 4" pipe this was done in 1964, *i.e.* after the case-study). The third society had fully irrigated lands as, in the period when it was functioning as a better farming society, it had constructed a tube-well and field channels. Of the 5 societies of type II, data are available regarding 4. One of these had purchased 2 pumping sets and a diesel engine, whilst another had also purchased 2 pumping sets and constructed tube-well. Similarly, in the case of the 3 societies of type III, 2 societies had purchased 5 pumpsets and the third had pooled the 3 pumpsets owned by individual members.

5.80. (ii) *Land Improvement*—With the completion of consolidation of holdings operations in Punjab, the societies organised were provided an opportunity to undertaking various land improvement measures. They depended, chiefly, on the governmental assistance of Rs. 4,000 for this purpose, and upon their own resources. The case studies, and data collected subsequently, indicate that 2 societies of type I undertook land improvement measures. One reclaimed and bunded 20 acres at a cost of Rs. 2,140/- and constructed 500 ft. of water channels, the other replanned the layout of the farm in view of its increased irrigation facilities—in doing so, it levelled 65 acres. The one society of type II, for which information is available, levelled 12 acres of its land. Each of the 3 societies of type III made efforts to improve the land. One undertook bunding in 50 acres and levelling in 18 acres, another levelled 12 acres and constructed 500 ft. of water channels. The third purchased a land leveller to use on its field.

5.81. (iii) *Improved Practices*—The case studies provide data regarding only 1 society of type I. This society was reported to be using improved seed and fertilizers. Detailed information was, however, subsequently collected regarding 2 other societies of this type *viz.*, Vyas and Deshbhaghat. In Vyas society, before organisation, fertilisers worth approximately Rs. 360 were used for crops grown on the lands later pooled in the society. In 1961-62, the value of fertilizers used was Rs. 653, it rose to Rs. 1,138, in 1962-63, Rs. 1,592 in 1963-64, and Rs. 1,815 in 1964-65. Improved seed was also, now, being used throughout the farm. The cropping patterns adopted have also changed radically over the years. Prior to organisation of the society there was no double-cropping. In 1963-64, 4 acres were double cropped, whilst in 1964-65, 20 acres were double-cropped. The plan for 1965-66, contemplates double-cropping in 40 acres. Deshbhaghat society too showed similar developments. Prior to formation of the society, members stated that approximately Rs. 860/- were spent on fertilisers. In 1962-63, fertilisers worth Rs. 2,400/- were used. As regards cropping, in 1964-65, except for 13 acres under sugarcane and cotton, the entire area of the farm was double-cropped.

5.82. For the societies of type II, the case-studies provide data regarding 3/5 societies. 2 of them are reported to be using chemical fertilisers and improved seeds. Details are, however, not available. A third society (Gobindpur) is mentioned as having started vegetable cultivation in an intensified way. In addition, further information has been collected regarding Rotipur society. Prior to organisation of the society, members were reported to have used fertilisers worth about Rs. 700 on their fields. In 1963-64, expenditure on fertilisers was Rs. 1,129. In 1964-65, nearly Rs. 2,000 was spent on fertilisers. Double cropping has also been increasing over the years.

5.83. Data provided regarding 1 society of type III indicates that it was using better seeds and fertilizers. It was also adopting improved practices such as the Japanese method of paddy cultivation and the line sowing of wheat.

5.84. (iv) *Mechanisation*—The study of societies in Punjab illustrates, the keenness of cultivators in that state to use mechanised and improved implements. Thus, of the 3 societies of type I for which data are available, one had purchased a tractor and iron ploughs, another had disposed of 7 pairs of bullocks and purchased a tractor, trolley, thresher and chaff cutter, and a third, that had acquired a tractor, trolley, chaff cutter and disc plough during its better farming days, had now purchased a thresher, seed drill, and cane crusher in addition.

5.85. Of the 3 societies of type II for which data are available one spent Rs. 4,000 in 1961-62 on the purchase of implements, whilst another purchased a chaff cutter and iron ploughs. The Third society, that acquired a tractor and trolley when it worked as a better farming society, had now added a cane crusher, maize thresher and wheat thresher.

5.86. Each of the 3 societies of type III purchased a tractor. In addition, between them, they purchased a cultivator. 2 land levellers and 2 harrows.

5.87. (*v*) *Productivity*—Data regarding yields are available in the case studies in respect of 7 societies only. In the case of 6 societies, information relates only to the single year 1962-63. In Nanakpur and Vyas societies (type I), gross production per acre was valued at Rs. 123 and Rs. 211 respectively. In Lassi Khana and Tandoori (type II), it was Rs. 318 and Rs. 134 respectively, whilst in Jiwan and Taravati (type III), it is reported as Rs. 196 and Rs. 214 respectively. In respect of Sultanpur society (Type III), gross per acre productivity is shown as declining from Rs. 218 in 1960-61, to Rs. 167 in 1961-62, and Rs. 160 in 1962-63. Against this, however, the case-study indicates an increase in cultivated area, (largely through reclamation), from 65.5 acres in 1960-61 to 124.37 acres in 1962-63.

5.88. Detailed data subsequently collected regarding 3 of the societies case studied, show that in Vyas society, whilst the value of gross production was Rs. 14,592/- in 1962-63, (the first year after formation), in 1963-64, gross production valued Rs. 20,492/-. In 1964-65, it had risen in value to Rs. 30,785/-. This sharp increase reflects the investment incurred by the society, in succeeding years, on better irrigation. seed, fertilizers and implements. Deshbhaghat society, similarly, shows increased production. In 1962-63, the value of gross production was Rs. 14,339/-. It rose to Rs. 18,806 in 1963-64. In Rotipur society, the value of gross production was Rs. 15,275/- in 1962-63. In 1963-64, it rose to Rs. 23,511.

5.89. *Farm Management*—Consolidation of holdings has led to compactness in the lands pooled in cooperative farming societies. Data available regarding 8/13 societies case-studied indicates that 1 society has its lands in a single block (even though the lands lie in 2 revenue villages, at the time of consolidation proceedings, care was taken to allot contiguous areas), 2 societies hold land in 3 blocks each, 4 societies hold land in 4 blocks each and 1 society has its lands in 6 blocks. This compactness has enabled an optimum use of irrigation resources and, as has been indicated, it has encouraged the process of land improvement, construction of channels etc. In one society, it has even been possible to remove the bunds dividing the fields of individual members. Tractor ploughing has also been facilitated.

5.90. Whilst the compactness of farms rendered efficient management easier, the case-studies indicate that little attention was paid to providing incentives for good work. Nowhere was a system of 'norms' followed to measure work. Generally, fixed monthly wages were paid to members for work on the farm. In certain cases, landless members were also given a portion of the crop that they harvested. Work squads were not being systematically organised. In Gobindpur society alone was a conscious effort being made to encourage specialisation in the members' skills. The farm was being managed in 3 units: (i) vegetable section, (ii) commodity section (other farm products), and (iii), agro-industries section (the society has started units for poultry keeping and sericulture). Thus, the vegetable section was under the charge of a landless member. The inputs are provided by the society. The landless member provides his labour, along with that of others whom he engages as casual labour whenever necessary. He gets a share from the sale of the vegetables.

5.91. *Employment*—Of the 12 societies for which data are available, in 5, the average land available per member is nearly 10 acres or above (Shamnagar—15 acres, Gobindpur—10 acres, Badshahpur—11.5 acres, Taravati—10 acres and Nanakpur—9.5 acres). In the remaining 7 societies, the average land per member varies between 5—7 acres.

5.92. The case-studies illustrate that size itself does not create employment for members. Thus, in Shamnagar society, (287 acres) the nature of membership was such that the society depended largely on casual labourers. In Nanakpur society, however, the size of the farm (113 acres), provided 10 members 2,157 work days and Rs. 4[illegible]2 as wages, only Rs. 303 being paid to casual labourers. In contrast in Tandoori society (74 acres) members worked an average of 174 days each and casual labourers were sparingly employed. Similarly, in Jiwan society (68.5 acres), an average of only 151 days work was available per member. Lassi Khana society (64.7 acres), however, illustrates that a small sized farm can, nevertheless, provide gainful employment. 10/12 members worked an average of 343 days each This was because the society was cultivating intensively—it is significant that this society had the highest gross productivity per acre, *viz.*, Rs. 318.

5.93. By and large, it can be said that greater thought is required to fully utilise the labour resource of members. In certain societies, this would mean keener member-participation, in others, it would imply more intensive schemes of production. Apart from Gobindpur society, which has started poultry keeping and sericulture, none of the other societies are reported to have taken up subsidiary activities. No evaluation, has however, been made of the employment generated in Gobindpur society. The case-studies, do not, also, go into details of the impact of mechanization on employment.

5.94. *Returns to Members and Distribution of Profits*—The character of the societies formed in Punjab is illustrated in the returns to members and the methods adopted in distributing income. As has been seen, the categorization of societies in terms of 'families' joining together, does not always give a clear picture of the nature of the societies. The number of independent 'households' involved is also a relevant consideration. Data relating to 12/13 societies show that only 5 of them possess land at the rate of about 10 acres or more per member. The remaining 7 societies hold between 5—7 acres per member.

5.95. However, in view of the fact that all of the societies studied include a combination of landowning and landless members, the method of distributing income between them becomes crucially important, particularly where the landless members traditionally worked as agricultural labourers. In addition, the nature of individual societies becomes clearer when an assessment is made of the income accruing to members, in relation to the wages paid to casual labourers.

5.96. In all the societies studied, a return for ownership of land, at the rate of approximately 1/3rd of the value of the gross production, is being paid to the landowning members. The method of distributing the remaining income may now be considered.

5.97. In the societies of Type I, Nanakpur paid Rs. 3,530/- as remuneration for work to 7 landowning members for 1,836 work days.

3 landless members however were paid only Rs. 562/- as wages for 321 work days. In addition, Rs. 303 were paid to casual labourers. Three conclusions emerge from this: (i) the land owners, drawing salaries as remuneration for work, earned nearly Rs. 2 per day; landless members earned only Rs. 1.75 per day; (ii) whilst the landowner members obtained employment for 262 days each, the landless worked for only 107 days each; (iii) whilst the society depended little on casual labour, it is evident that it functioned chiefly in the interest of the landowners.

5.98. Vyas society showed similar features. In 1962-63, Rs. 3,200/- were paid remuneration in the form of salaries to members. Out of this, 2 landowning members received Rs. 1,200. As Secretary and tractor driver, they received salaries at Rs. 50 per month. The other 7 working members received remuneration in the form of salaries at Rs. 25 per month. These included 4 landless members, each of whom earned only Rs. 300 as remuneration for work. Whilst the landless members were also given a share of the crop harvested, and permitted to work outside the farm, it is evident that their interests came second. Once again, however, it is significant that the members did the work of the farm chiefly by themselves. Only 32 man days of casual labour were allowed.

5.99. In Deshbhaghat society, on the other hand, wages paid to non-members were roughly equal to those received by members. This was because the members were old and many of their children and relations had emigrated. Most of the members were landowners.

5.100. Details are not available regarding the two other societies of type I (Shamnagar and Khushwant). However, in them, member-participation was scant, and casual labourers were freely engaged.

5.101. The societies of type II may now be considered. Lassi Chana society, paid Rs. 5,761 as remuneration for work to members and Rs. 1,884/- to non-members. It provides a healthy example of members working to their full capacity. Discrimination against landless members did not arise, as all 5 landless members were related to the 2 landowning groups. Similarly, in Tandoori, as the landless members belonged to the 2 landowning families, they received remuneration for work at an equal rate: 3.125 were paid to 9 working members. and only Rs. 202 to casual labourers.

5.102. In Rotipur, in 1962-63, 5 members earned Rs. 3,000 as remuneration for work and Rs. 1,632 were paid to casual labourers. In 1963-64, Rs. 6,050 was earned by 8 members as remuneration for work and only Rs. 1,740 went to casual labourers. Except for 2 members, who were paid Rs. 1,200 each, all others, including 2 landless Harijans, were paid Rs. 600 per year. There was no distinction between the landowners and landless in this respect.

5.103. Details regarding Pandu and Gobindpur societies are not available. However, it is indicated that, in the latter, apart from the manager and tractor driver, who receive salaries of Rs. 100/- each per month, all other working members are paid Rs. 60/- per month. In addition, members receive free vegetables, fuel and medical treatment. Wheat is also sold cheap to them.

5.104. Of the societies of type III. Badshahpur paid Rs. 6,880/- as remuneration for work to 13 members and only Rs. 1,375/- were paid to non-members. The case-study does not clearly indicate whether the 8 Harijan members were paid at the same rate as the land owners. In Jiwan, members earned Rs. 3,427 as remuneration for work against Rs. 567/- paid to non-members. Finally, in Taravati, 9 members earned Rs. 5,394/- as against Rs. 5,321 paid to non-members.

5.105. From these facts, the following conclusions emerge: (i) The insistence on return for land, at 1/3rd of the gross-produce, illustrates the ownership bias of the programme in Punjab; (ii) However, in all the societies except 3 (Shamnagar, Khushwant and Deshbhaghat), work on the farm was primarily done by the members themselves (even though in 3 cases, the members got no employment on the farm for half the year); (iii) in 2 societies in which landless agricultural labourers were included as members, there was a tendency to depress their income, either by fixing low remuneration in the form of monthly salaries, or by paying them at lower daily rate. This was not, however, so in all cases; (iv) where landless members were related to landowning families, they drew remuneration at the same rate as landowning members.

5.106. In these circumstances, the method of distributing net profits becomes important. The case-studies, however, indicate that the societies of Punjab, after meeting the return for ownership of land, and the current farm business expenditure on labour etc., generally ploughed back the remaining income in capital investments. The considerable extent of improvements made on the land, and the machinery purchased, has already been indicated. Unfortunately, the case-studies indicate that profits have not been reguarly distributed. As production and income has, in a member of cases, increased, this omission has adversely effected the interests of those who have contributed their labour. In certain cases e.g., in Badshahpur and Gobindpur societies, whilst profits have been distributed, the exact amount has been veiled, for fear, partly, of the audit fee imposed at 15 per cent of the net profits. It would, therefore, be in the interests of th programme if the State Government reconsiders relaxation in th conditions now imposed on audit fee. The equitable distribution income will also have to be ensured.

5.107. Financial Assistance: Most of the societies organised received the full amount of assistance available from government under the approved pattern. In 2 cases, the societies, having received this money, did not cultivate jointly. Apart from this assistance, however, little assistance is mentioned from the other developmental departments. As regards cooperative credit, too the situation was tight. Short-term loans were not being advanced according to production plans. Under existing instructions cooperative farming societies in Punjab can receive clean credit only to the extent of Rs. 5,000/-. Amounts beyond this, require the pledging of the land. It is not surprising, therefore, that only one society received an amount of more than Rs. 5,000/- as short-term loan (it received Rs. 6,327/-). No mention is made of medium and long-term loans from cooperative financing agencies. In the absence of such assistance, societies had to depend more on their own resources. Some societies had been able to raise sizeable amounts as deposits.

5.108. *Technical Guidance*—In Punjab, a Joint Registrar has been appointed at the state level to work for the cooperative farming programme. He has, however, been entrusted with a variety of other subjects. As a result co-operative farming has, by no means, received his primary attention. At the divisional and district levels, too the Deputy and Assistant Registrars deal with all cooperative activities and are not backed by any special staff for cooperative farming. In each pilot project, however, there is an inspector (who has his office at Block Headquarters), and 2 sub-inspectors. These officials look only to the pilot project societies. The general line inspector at the block level looks after non-pilot societies.

5.109. The studies indicate that whilst certain inspectors took a keen interest in promoting the programme, the officials approach to cooperative farming frequently ran contrary to the broad guiding principles suggested for pilot projects. Many responsible officers felt that the minimum membership of 12 was an unnecessary restriction. They openly suggested the formation of societies by 2 cultivating units. Their attitudes perculated to the field workers.

5.110. As regards assistance from the block—staff, the case studies reveal that this was not always forthcoming. Many societies had undertaken the construction of cattle sheds, but these were incomplete for want of cement. In one instance, when a two-day camp was organised to go into the problems of cooperative farming societies, the district level officers for agriculture and industries and the sub-divisional officer (Electricity) failed to arrive.

DELHI

Three joint farming societies were studied in Delhi. Two of them, *viz.*, Jhoola and Janta were organised mainly under official influence. In both cases, land was allotted to refugees, from West Pakistan with the promise that they would be given permanent occupancy rights provided they formed a society. Initially, the members were asked to form a multi-purpose society, but when the scheme of pilot projects was launched, they were asked to transform their respective societies to joint farming societies. In both cases, this divided the settlers, half of whom joined together, the other half continuing individual cultivation. At the time of study, however, both societies were experiencing difficulty and reevrting to individual cultivation. Now Jhoola society had, nevertheless, in the one year of its joint operation, succeeded in reclaiming 24 acres at a cost of Rs. 6,000. In addition, with the assistance it had received, both technical and financial, it had introduced new crops, purchased improved implements and stepped by the value of its gross production from 18,651 in 1961-62, to Rs. 45,573 in 1962-63. All 29 of its members worked on the farm 20 held land in their names.

5.112. The third society *viz.*, Pallara, whilst organised by the initiative of the members themselves, was functioning more like a better farming society than a joint farming society.

CHAPTER VI

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, VISVABHARATI, FOR THE STATES OF WEST BENGAL, BIHAR AND ORISSA

The Vishwabharati Agro-Economic Research Centre made a study of the programme in the States of West Bengal, Bihar and Orissa. In total, 11 cooperative farming societies were studied. These included 10 joint farming societies organised in 5 pilot projects and 1 non-pilot collective farming society.

6.2. State-wise, the number of societies studied was as follows:

State	Joint Farming Societies		Collective Farming Societies		Total
	Pilot	Non-pilot	Pilot	Non-pilot	
1	2	3	4	5	6
West Bengal	2	..	..	..	2
Bihar	4	..	..	..	4
Orissa	4	..	..	1	5
TOTAL ..	10	..	..	1	11

6.3. The study covers the programme in the districts of Burdwan (West Bengal), Sahabad and Ranchi (Bihar), Cuttack and Sambalpur (Orissa). For purposes of analysis, it might be convenient, first, to consider the societies of West Bengal and Bihar as, in Burdwan and Sahabad, certain parallel characteristics emerge from similar socio-economic conditions. For instance, the widespread prevalence of share-cropping is reflected in the attitudes of members towards the societies formed. Leadership, too, has been provided by landowners who were hitherto generally dependent on tenants for cultivation. In Orissa, on the other hand, the programme has developed along different lines. In the course of the past four years, nearly 50 societies have been formed in Bargarh tehsil of Sambalpur district. The reasons leading to this concentration of societies, their characteristics and prospects, deserve careful consideration.

WEST BENGAL AND BIHAR

6.4. The societies of West Bengal and Bihar can, typologically, be classified in the following manner:

Type-I—The societies formed at the initiative of big and medium land-owners who traditionally had their holdings cultivated by share-croppers. In this category may be included both the societies studied in Burdwan (*i.e.* Sandeshnagar and Niranjanpur), and both the societies of Sahabad (*i.e.* Narsinghpur and Kataria).

Type-II—Societies formed by tribals, principally in order to improve their barren lands. In this category will fall the two societies studied in Ranchi (*i.e.* Burhanpur and Satpura).

The characteristics of these types are indicated below:

6.5. *Membership: Leadership, Motivation and Identification with society*—Sandeshnagar society of type I had 7 members, 6 of whom, (including 4 women), belonged to 2 Satgope Hindu families. These 2 families contributed 21.15 acres, out of the total 21.95 acres pooled in the farm. The remaining 0.8 acres were contributed by 1 Muslim member. Only 2 members were associated with the work of the farm. One of them worked as secretary of the society, restricting himself to the maintenance of accounts etc., the other, who happened to be the Muslim member, alone participated in farm operations. As is evident from this, member-identification with the society was scant. Cooperative farming appealed to the dominant families as a technique of ensuring 40 per cent of the gross produce as return for ownership of land without the hazards of share-cropping. It also provided a means of obtaining financial assistance from government.

6.6. In Niranjanpur society, there were 12 members and 30 out of the 100 acres owned by them had been pooled. In actual fact, 2 members had pooled 20 acres between them, one was a school teacher and the other was the secretary of the service cooperative. Neither of them participated, either physically or in any supervisory way, in the management of the farm. For them, the society represented a way of ensuring a fixed return for their land. Of the others, 1 was partly a share-cropper. He was compelled to join the farm as the land that he was cultivating on share was pooled in the society by the land owner. Another member joined the society because he was evicted from the land he had taken on lease. The 2 landless members joined the society in the hope of better employment and wages. The report states that out of the 12 members, only 4 physically participated in farm operations, 2 of them being landless labourers. It is significant that neither the chairman nor the secretary of the society had pooled any land. This is inspite of the fact that they were both energetic and educated persons, who were office bearers in a number of cooperative institutions in the area. As will be seen from this, the society served to satisfy the needs of the rent-receiving members. As production had increased, they were happy with their share of the gross return. The landless were, however, dissatisfied and left the society after one season. They did not receive a wage-bonus as the society, despite increased production, ran at a loss.

6.7. The working of societies in Burdwan, therefore, illustrates the problems arising out of the continuance of share-cropping. As the actual tiller was frequently not the owner of the land, societies reflected the interests of the non-cultivating rent-receivers, who were often absentees. The small farmers of the area were hostile to 'cooperative farming' as it had presently developed. As these farmers depended partially on share-cropping, they feared that the formation of societies would lead to their eviction from the lands which they share-cropped.

6.8. The same divorce of ownership from tilling is illustrated in the societies of Sahabad. Thus, in Narsinghpur, 15 members pooled 28.72 acres. This represented only 13 per cent of their total holding.

The lands that were pooled were situated some 2 miles away from the village and, rather than entrust their individual plots to share-croppers, the members felt that these lands should be pooled and entrusted to an institution. In this decision they were motivated also by a desire to escape the possible consequences of the Bataidari Act that provided a measure of security to share-croppers. The possibilities of finance from government provided an additional motive as the lands in question were still unirrigated. Of the 15 members, 14 were Rajputs and 1 a Brahmin. Most of them were substantial landowners. The general level of education was high, one member even having attended the cooperative training school at Pusa. The members were, however, more interested in the holdings which they had retained for individual management. Only 1 of them took an active interest in the pooled lands. He, too, worked in a supervisory capacity. The other members were rent-receiving landlords in relation to the society. 50 per cent of the gross produce was paid to them as return for ownership of land, even though the bye-laws permitted that a maximum of only 35 per cent be paid in this manner.

6.9. In Kataria society, the lead was also taken by substantial farmers, though small and medium farmers were also enrolled. Here again, the purpose of the organizers was, primarily, to develop a 30 acre plot by institutional means. Members pooled only such of their lands as fell within these 30 acres. Out of a total of 44 members, 13 did not reside in the village, and most of the others were either non-cultivating or interested chiefly in their individual holdings. Only 5 members were reported to work on the pooled lands—4 of these members were landless labourers. The society existed, therefore, for the benefit of absentee landowners, rent-receivers and disabled persons. This is illustrated in the method of distributing the gross produce: 50 per cent was distributed as land return even though the value of gross production fell far short of the cost of cultivation.

6.10. The societies of type II were formed in tribal areas. The members were faced with the problem of reclaiming their barren, 'tand' lands. In order to do so, they were encouraged both by their traditional leaders and by the local officials, who promised financial and technical assistance for the reclamation of these lands. Only the unreclaimed lands of members were, therefore, pooled. In Burhanpur society, 22 members contributed 73.3 acres to the society. There was a high degree of social homogeneity among members and a desire to have these lands improved. Inspite of traditions of cooperation and mutual aid, however, the members could not identify themselves fully with the society. Though assistance both technical and financial was being provided by governmental departments, the members felt that it was uneconomic to use their own labour for the development of these lands. They found that it was possible to earn a better wage in the rapidly expanding heavy industries near Ranchi than on the barren lands of their society. They were, therefore, inclined to treat the society as an institution, primarily under government care.

6.11. In Satpura society, conditions were similar. 18 members had pooled 94 acres of 'tand' land, which constituted about 60 per cent of their total holding. However, wages offered in Ranchi were more attractive than the income immediately possible from the pooled lands.

Only 1.60 acres were sown in 1962-63. In 1963-64, 15.45 acres were sown. The capacity of the farm to provide employment was consequently limited and the returns still meagre. As in Burhanpur, therefore members were dependent chiefly on Governmental assistance for the development of these lands. They were reluctant to use their scarce resources, either of labour or capital, for this purpose.

6.12. *Agricultural, Production*—As the societies studied in West Bengal and Bihar were recently organised, the report draws attention to the limited data available regarding their economic performance. Whilst production potential had increased, through investment in land development etc., in the absence of figures indicating a cost: benefit ratio, the extent to which such investment was economic could not be clearly assessed. The report observes, however, that there was general opinion of some improvement. It points out, though that societies studied had relied chiefly on external assistance for development and had yet to mobilize their internal resources, adequately.

6.13. The data available in the case studies are analysed below:

6.14. (i) *Increased irrigation*—Amongst the societies of type I, those in Burdwan were irrigated by the canal system of the D.V.C. In Sahabad, on the other hand, the need for further irrigation was a primary consideration of the members. Narsinghpur society had, therefore, invested Rs. 500 on the boring of two tube wells and further Rs. 2,500 on the purchase of an electric engine. The potential created would lead to full irrigation of the 28.72 acres pooled. Similarly, Kataria society had spent Rs. 3,250 on the construction of an electric tube well. In Ranchi, Government assistance had been utilized for sinking 3 new wells in Burhanpur. At the time of study, Satpura society had been sanctioned assistance by the Block for the construction of 4 wells.

6.15. (ii) *Land Improvement*—Whilst the report indicates that both Sandeshnagar and Niranjanpur had undertaken various land improvement measures, details are not given. In Sahabad Narasinghpur society spent Rs. 600 in 1962-63 on the terracing and levelling of its lands. As it could not raise adequate medium term loans for land improvement, short-term credit was used for this purpose. In Ranchi, land reclamation was the major reason for the formation of the societies. The initial work of levelling and contour bunding was undertaken through the soil Conservation Department both in Burhanpur and in Satpura. Thereafter, whilst in the former society 40/73 acres had been brought under cultivation, only 15.5/94.5 acres were sown in the latter. The reasons for the limited enthusiasm of members to work on these lands, have already been indicated. Whilst returns, in terms of investment incurred, were still low, it is significant that the structure of cooperative organisation was considered necessary to undertake the work in question. It is also to be remembered that the gestation period for economic returns is longer when investment takes place on barren lands than when it is incurred in improving cultivated lands.

6.16. (iii) *Improved practices*—The case studies point to the varying adoption of improved practices, in each area. In Burdwan. where the general level of agricultural enterprise was high, the farmers of the district were widely acquainted with improved techniques. The cooperative farming societies, however, were both using more fertilizers than non-members. Thus, whilst Sandeshnagar society used fertilizers worth Rs. 127.37 per acre, the individual cultivators of this area used fertilizers worth Rs. 73.61 per acre. In Niranjanpur, the position was similar. The society spent Rs. 74 per acre on fertilizers, whilst individual cultivators could spend only Rs. 10 per acre. Data regarding other practices are not available.

6.17. In Sahabad, less thought was given to the adoption of improved practices. Whilst Narsinghpur had introduced sugarcane in its newly irrigated area, which was a new crop for this village, there was little effort to use improved seed, better implements or fertilizers. Kataria, too, was yet to adopt improved techniques.

6.18. In the tribal societies of Ranchi, as the primary concern was to reclaim barren lands with governmental help, little effort was made to use improved methods of cultivation.

6.19. (iv) *Productivity*—The yields achieved follow the pattern of practices adopted. Thus, in Burdwan, both societies showed gross yields per acre substantially more than in the adjoining lands of non-members. In Sandeshnagar, the value of the gross yield per acre was Rs. 842, compared with Rs. 719 in the fields of non-members. In Niranjanpur. the comparative yields were worth Rs. 56 and Rs. 450 respectively. In terms of the value of net yields per acre, however, the societies fared worse than the non-members. This was because of the high cost of cultivation.

6.20. The Sahabad societies, formed through the pooling of inferior land and receiving only the minimum attention of members, showed low productivity. Whilst Narsinghpur had created potential for future development, in the year under survey, gross yields were worth only Rs. 241.36 as compared to Rs. 328 and Rs. 333 for the lands cultivated individually by members and non-members respectively. The latter categories of land, at the time of survey, were better developed and better irrigated. The same applied to Kataria, where yields of the lands of the society were worth Rs. 145.6 per acre as compared to Rs. 260 per acre on other lands in the area.

6.21. In Ranchi, as is to be expected, the nature of the land pooled restricted gross yields to a very low level. In Burhanpur, they were worth only Rs. 24.25 per acre, as compared to Rs. 105 and Rs. 128 on the lands retained for individual cultivation by members and non-members respectively. In Satpura, whilst the value of gross yields per acre on the lands of the society were slightly more than on the lands retained by members, they were worth only Rs. 57.8 as compared to Rs. 98.5 on the lands of non-members.

6.22.. *Farm Management*—In the societies of type I, leadership was provided by substantial farmers who had close links with official workers and who were frequently educated. One of such members was generally entrusted to look to the management of the farm, which, as has been indicated earlier, operated in the interest of the rent receivers. The quality of management required, therefore, was akin to that which was needed when the lands were leased for share-cropping. Little attention was paid to the utilization of the members' labour on the farm. Work teams were not organised and incentives for labour were not provided. This led, in the case of one society, the dissatisfaction amongst the landless members.

6.23. In the societies of type II, members evinced scant interest in problems of management. It was considered that the primary responsibility for improving the quality of the barren lands rested with the governmental agencies initially associated with their reclamation. The members participated in farm operations chiefly in order to supplement their wage-earnings.

6.24. *Employment*—The case studies indicate that in none of the societies was any serious effort made to provide employment to members on the farm. In all the societies, the capacity to provide full employment was restricted as only part of the holdings of members were pooled. In the societies of type I, the majority of members were, in any case, either absentees or rent-receivers. In those of type II, where members were themselves workers, the income offered by the farm was unattractive when related to that which could be earned at various construction sites. Thus, data relating to Burhanpur indicate that only 662 man-days were provided by the 22 members and their families in the year under survey. 47 days were the maximum contributed by any one member. In Satpura, the 18 members and their families provided only 638 man-days to the society.

6.25. Nor was employment potential stepped up through the starting of agro-industries. Only 1 society *viz.*, Burhanpur, was reported to be engaged in any subsidiary activity. In this society, 35 birds had been provided through governmental assistance. 300 chicks had been raised at the time of the study.

6.26. *Returns to members and Distribution of profits*—The most significant feature of the societies of type I. was the clear ownership bias. 40 per cent of the gross produce in Burdwan and 50 per cent of it in Sahabad, was paid to the land owning members. The societies, therefore, served to continue the system of share-cropping under the disguise of return for ownership of land. The remaining produce was generally sold in the open market in order to meet farm business expenses, wages, etc. It is important to observe in this connection, that the non-working members were satisfied with their return from the societies formed. As production had generally increased on the lands pooled, they received a larger share as return for ownership of land; they were also saved the hazards of share-cropping. As regards the societies of type II, in view of the limited production, the report indicates that the only tangible return to members was in the form of wages from the farm.

6.27. *Financial assistance*—Data relating to financial assistance indicate that in Burdwan, Sandeshnagar society had received Rs. 10,300 and Niranjanpur had received Rs. 10,400 under the existing pattern of assistance. In Sahabad, the two societies studied had received medium-term loans from the Cooperative Department for sinking of tube-wells. In Ranchi, Government had provided over Rs. 15,000 as financial assistance to Burhanpur society for the sinking of wells, construction of a godown, poultry keeping etc. Satpura society had received nearly Rs. 8,000. Assistance for well construction had also been sanctioned from the resources of the Tribal Welfare Department.

6.28. The case studies do not indicate whether any assistance was available from the cooperative financing agencies to societies in Burdwan. In Sahabad, both societies are reported to have received medium term loans from the central bank, amounting to a total of Rs. 5,500. In addition, Narsinghpur is indicated to have received Rs. 600 as short-term loan. The report does not indicate whether the loans received were advanced to the society as an entity, or to individual members, who utilized the loan on the lands pooled. Study of the programme in Bihar indicates that, generally, no loans are advanced from the Central Banks to Cooperative farming societies. Members may, however, apply in their individual capacities for the advance of a loan.

6.29. *Technical Guidance*—In West Bengal, administrative arrangements for the programme need strengthening at all levels. At the state level, there is currently an Assistant Registrar dealing exclusively with cooperative farming. There is no special staff for the programme at the district level. The case studies do not indicate whether the technical officers of the district and block took any interest in the working of the societies. At the pilot project level, whilst an official of VLW—rank has been specially posted, he is not assisted by an inspector or extension officer exclusively for cooperative farming.

6.30. In Bihar, at the state level, a Special Officer of the rank of Deputy Director (Agriculture), works exclusively for the cooperative farming programme. He is assisted by a Deputy Registrar. In the districts and at the project level, however, the existing arrangements are as in West Bengal. The report indicates, though, that in Ranchi district the Agriculture and Soil Conservation Departments were assisting the societies in improving their lands. The Block officials, too, were coming forward with assistance.

6.31. *Agricultural Income Tax*—Along with the continuance of share-cropping the report states that the imposition of agricultural income tax on cooperative farming societies was a reason for the slow progress of the programme in West Bengal. This measure, which aimed at preventing large landowners from organising spurious societies, became a serious hindrance to small farmers, who were individually below the assessable limit, when they wished to join together in a cooperative farming society. Whilst West Bengal Government has now taken a decision to amend the Agricultural Income Tax Act, the existence of such a clause served as a positive disincentive to the programme.

ORISSA

5 societies were case-studied in Orissa; they included 4 joint farming societies (2 in Cuttack and 2 in Sambalpur), and 1 collective farming society (in Cuttack). As, in Sambalpur, a cluster of 50 societies had been formed in the past four years, it was considered necessary to supplement information regarding this district. Additional data were, therefore, collected regarding 5 more joint farming societies in this district.

6.33. For purposes of analysis, the societies may be classified in the following types:

Type I—In this may be included the 2 joint farming societies of Cuttack, having heterogenous membership in terms of land-ownership (Jagannath and Mahanad). The societies were organised, primarily in order to provide a system of management which could ensure better use of the lands pooled. The lands pooled, however, represented the inferior part of land resource of the members, the better tracts, in many cases, being retained for individual cultivation.

Type II—In this category may be included the 2 joint farming societies case-studied in Sambalpur (Amarjeevan and Pradhan) and the 5 others for which data were subsequently collected (Annapurna, Mithagaon, Lokia, Bansgaon and Lakhanpur).

Within this broad category, the societies may be divided into 2 sub-groups:

(a) Those in which membership, in terms of land-owning status, was heterogenous. In this may be included 4 societies *viz.* Amerjeevan, Annapurna, Lokia and Bansgaon. Though their composition was similar to those of type I, these societies are to be clearly distinguished from them. The lands pooled did not represent the inferior plots of members. Whilst there was partial pooling in Amarjeevan and Annapurna, the lands contributed were of good quality, having a potential for development and situated in a compact block. There was complete pooling in Lokia and Bansgaon.

(b) Those in which members had a similar land-owing status. In this may be included 3 societies *viz.*, Pradhan, Mithagaon. and Lakhanpur. Whilst, in Pradhan, members had pooled only part of their holdings, as in Amarjeevan and Annapurna, lands of good quality, compactly situated, had been contributed. In Mithagaon and Lakhanpur there was complete pooling.

Despite these differences, all 7 societies of Sambalpur may be classified in the same broad type. In each case, the members were chiefly motivated by a desire to utilise more fully the potential for development created by the irrigation system of the Hirakud project and the inclusion of Sambalpur amongst the IADP districts. In order to utilize the resources of the area more fully, the members, felt that they should join together.

Type III—In this may be included the collective farming society, Kaitholi.

6.34. *Membership: Leadership, Motivation and Identification with the society*—Jagannath (Type I), had 21 members, 19 of whom belonged to the Khandayat community. They were drawn, principally, from two main groups *i.e.*, the Mahapatras and the Routs, who had kinship ties extending over 4 generations. Whilst 2 members owned 45 acres, 4 others owned 34.15 acres and 15 others owned 35.93 acres. Out of their total landowning of 115.08 acres, members pooled 50.51 acres in the society. Initiative in organisation was taken chiefly by a former tehsildar who provided the managerial enterprise of the society. An absentee Brahmin, who wished to have his lands efficiently cultivated, was also keen on a society being formed. The other members were drawn into the society in the hope of benefiting from the managerial skill of the tehsildar. In addition, as the lands pooled were under-developed, the members hoped that by joining together they would be in a position to provide irrigation, where necessary, and remove water-logging from the areas which were affected. To this extent, the society was also 'tract oriented'. 14/21 households participated in work on the farm. The extent of member-participation was, however, limited, as 18 households had also to manage the lands that they had retained for individual cultivation.

6.35. In Mahanad, the initiative was taken by the village sarpanch, a retired I.P.S. official. The society comprised 21 members drawn from 16 households. Both in economic and social terms, the membership was heterogenous. The President and 11 others, belonged to the dominant Karan community, that contributed 73.21 per cent of the pooled land; 5 members were Kandayats and 4 belonged to the Scheduled Castes (3 of whom were landless). Members were drawn to the society because the leadership of the President promised managerial skill of a high order. The President, in turn, hoped that by organising the society, the under-developed lands that were pooled would gain in irrigation and be protected from cattle menace. He enrolled the landless members chiefly with a view to providing watch and ward facilities over the fields of the society. Out of their total holding of 92.14 acres, members pooled only 40.72 acres in the society. 7/21 members were absentees. None of the land-owning members participated in farm operations, though 3 of them helped in the supervision of work. Work on the farm was, therefore, undertaken through the landless members, with the assistance of hired labour. In these circumstances, the landless members were soon disappointed with their lot. At the time of study, they had quit the society and formed a separate collective farming society on lands that were allotted to them.

6.36. Amongst the societies of type II, as indicated earlier, the driving motivation in all was to utilise more fully the resources, both of irrigation and technical guidance, being made available in the district. Within this broad type, however, individual societies varied widely in their composition and the degree of identification of members with their societies.

6.37. In Amarjeevan, Annapurna, Lokia and Bansgaon (sub-group) membership was heterogenous in terms of the land-owning status of members. Thus, 5 members of Amarjeevan society owned 189 acres between them, 7 others owned 50.63 acres and 1 owned only 5 acres. In Annapurna, 6 members owned over 20 acres each, whilst 6 others owned 10 acres each. 8 of the remaining members were medium and small farmers and 1 was landless. In Lokia, 1 member owned 96 acres, whilst the remaining 9 members owned 30 acres between them. In Bansgaon, 2 members owned 60 acres, whilst the remaining 10 owned 70 acres. On the other hand, in Pradhan, Mithagaon and Lakhanpur (sub-group b) membership was, by and large, homogeneous. Thus, in Pradhan, 1 member owned 18 acres, 8 others owned 65 acres, and 1 owned 1 acre. In Mithagaon, 13 small cultivators owned a total of 58.8 acres. In Lakhanpur, 12 medium cultivators owned 106 acres between them.

6.38. In terms of land pooling, whilst all the land owned by members was pooled in Mithagaon, Lokia, Bansgaon and Lakhanpur, partial pooling was allowed in Amarjeevan, Pradhan and Annapurna. Thus, in Amarjeevan, only 26.6 acres were pooled—this represented barely 10 per cent of the total land owned by members. In Pradhan, 31 acres were pooled, which represented 37 per cent of the total land owned by members. In Annapurna, 55 acres were pooled, which represented 16.5 per cent of the land owned by members. As is to be expected, therefore, member-participation was more in the former societies, where land was fully pooled, than in the latter, where large amounts were retained for individual cultivation.

6.39. The reasons for partial pooling in the 3 societies indicated are important, as they illustrate the approach of the members towards the programme in this district. In each of them, only those lands were pooled which formed compact units for purposes of management and planning. Thus, in Amerjeevan and Pradhan, the lands pooled were in one compact block. In Annapurna, the lands pooled were in 4 blocks that were, more or less, contiguous. The members strongly felt that, to begin with, they should phase the pooling of lands in such a way that the society could plan and deploy its limited resources in an optimum manner. In each case, the members intended to pool more lands after watching the performance on the lands already pooled. Further pooling would also be regulated by the availability of additional resources. This phasing was considered necessary in order to render meaningful the act of pooling. Thus, in Amarjeevan, the lands of members within the village could be consolidated into two more blocks, which would later be pooled in the society. The same applied to Pradhan and Annapurna. Another reason for partial pooling arose from the scattered nature of members' holdings. Out of the total land-owning of 244.63 acres of members of Amerjeevan society, only 109 acres were situated in the village in which the society was formed. The rest was owned in other villages. Similarly, the 305 acres owned by members of Annapurna society were scattered in 6 revenue villages. The 55 acres pooled in the society represented the entire holding of members in the village in which the society was formed. The members proposed, in due course, to pool such of their other blocks, as were situated at a manageable distance from the present land of the society. Whilst such partial pooling divided the attention of members, their decision to phase the pooling of lands stemmed from a desire to develop their societies gradually, and in the light of their available resources. It is to be distinguished from the partial pooling in the societies of type I, where inferior lands were pooled.

6.40. The one society of type III, owned its origin to the initiative taken by a retired professor, who was keenly interested in the cooperative movement. As early as in 1951, 72 vegetable growers leased 500 acres from private sources and 1,399 acres from Government. The membership of the society rose to 85 in 1956 and 102 in 1964. It was, however, fluid in nature, new entrants being added each year, and others leaving. Thus, in 1964, out of the 56 working members, 34 had been enrolled in 1963-64 itself. 6 members had been continuing since 1951 and 11 had been enrolled in 1962-63. During the period of its existence, the society had been through many viscissitudes. Both the private landowners, and Government, from whom it obtained land on lease, did not intend to let it acquire any tenancy rights. As a result, it was periodically evicted from the lands that it cultivated. At the time of study, the society had only 201 acres, that had been leased from Government. The members of the society were drawn from the landless community and, according to the availability of work on the farm, they participated in field operations. The permanency of members and their degree of identification with the society varied according to the extent of land available. The society illustrates, once again, the major problem faced by collective farming societies *viz.*, the lack of fixity of tenure. Even though the organization of cooperative farming societies of landless labourers, on Government waste lands, is an accepted policy, the history of this society shows that it was allotted lands neither on a permanent nor a semi-permanent basis.

6.41. *Agricultural production*—The data available in the case-studies and that obtained subsequently, are analysed below:

(i) *Increased irrigation*—Of the societies of type I, Jagannath had taken steps to increase its irrigation facilities. It had repaired 500 ft. of canal. Amongst those of type II, Annapurna had purchased a pumping set, bringing under irrigation 10 acres, Mithagaon had constructed a channel, in order to irrigate five acres, whilst, Lokia and Bansgaon had applied for loans for the construction of 4 wells each. In Lakhanpur, the members of the society had dug a channel from the lift irrigation project in the area and had purchased two pumping sets. The collective farming society, (type III), had not been able to invest for this purpose, owing to the insecure nature of its tenure.

6.42. (ii) *Land Improvement*—The case-studies indicate that, in order to improve the condition of its land, Jagannath (type I) had formulated a scheme to end water-logging in its fields. The scheme, valuing Rs. 7,000, was awaiting financial sanction. Amongst the societies of type II, Pradhan had reclaimed 1.5 acres, bunded and fenced 1 acre and levelled 10 acres. Mithagaon levelled 16 acres, whilst Lokia fenced 30 acres. In Bansgaon, 15 acres were levelled. Lakhanpur had reclaimed 70 acres for cultivation, 5 acres had been bunded 3 acres fenced and 15 acres levelled. The total cost of land development in this society was Rs. 27,392. Once again, as far as Kaitholi society (type III) was concerned, land improvement measures were rendered difficult owing to the short lease given to the society. Though 25 acres were in need of reclamation, the society was unable to raise finances for this purpose. It had, nevertheless, taken steps to fence its fields in order to protect them from stray cattle.

6.43. (iii) *Improved practices*—The report indicates that Jagannath (type I) was using improved seeds, fertilizers and insecticides.

6.44. All the Sambalpur societies of type II, were following improved practices. Thus, Amarjeevan was using a new variety of paddy and supplying improved seed to the rest of the village. It had also introduced 3 new crops to the area *i.e.*, jute, maize and wheat. The production plan of the society was carefully formulated in consultation with the technical staff of the area. The society had used insecticides, nitrogenous and phosphatic fertilizers and improved implements. Similarly, Pradhan had adopted many improved practices. Chemical fertilizers and insecticides were used, green manuring had been undertaken and seed carefully treated. The society had used a tractor to plough its lands. Here again, the production plan was prepared with the help of the technical staff. The soil had been tested, and the cropping pattern decided accordingly. The society had purchased a sprayer, weeder and iron ploughs. The same evidence of careful planning is illustrated in Annapurna. Improved seeds, fertilizers and better cultivating practices were being followed. The society had planted 1.25 acres under the banana development scheme. In addition, it had formulated a programme for the growing of sugarcane. Vegetables were grown in 2 acres. In Mithagaon, over 3.700 kilograms of chemical fertilizers were used in 1963-64. As cultivation was carefully conducted, the Agriculture Department had purchased seed from this society for distribution in the area. The same awareness of improved techniques is seen in Lokia, Bansgaon and Lakhanpur. Thus, in Bansgaon, new crops were introduced: vegetables were sown and sugarcane planted in 2 acres; in Lakhanpur, during 1964-65, Rs. 1,352 were spent on improved seed Rs. 2,285 on fertilizers and Rs. 86 on insecticides. The society was selected by the Agriculture Department for seed multiplication.

6.45. The care taken by the societies to formulate appropriate production plans, diversify cropping patterns, adopt improved techniques etc. is evident. All the societies studied in Sambalpur tried to ensure that they drew upon the technical guidance and other facilities offered in the district as a consequence of the IADP programme.

6.46 (iv) *Productivity*—Amongst the societies of type I, in Jagannath, the value of gross yields per acre on the lands pooled in the society were double those that were achieved on the lands retained for individual cultivation. In Mahanad, whilst production was low, owing to the inferior lands pooled, yields on the farm were worth Rs. 99.6 per acre as compared to Rs. 32.3 on the fields retained by members for individual cultivation. Yields on the fields of non-members were Rs. 394 per acre, as the lands were superior and not subject to floods.

6.47. Amongst the societies of type II, the report indicates that, in Amarjeevan, the value of gross yields per acre was Rs. 273 on the farm, when compared to Rs. 171 on the lands cultivated individually by members, and Rs. 147 on the fields of non-members. In Pradhan, similarily, the yields in the society were worth Rs. 240.3

per acre as compared with Rs. 222 on the lands retained by members for individual cultivation.

6.48. Comparative information, in respect of the other societies of this type, is not available.

6.49. Even in the collective farming society (type III), the value of the gross yield per acre was higher than that achieved on the fields of non-members. Thus, whilst yields per acre were valued at Rs. 236 on the lands of the society, they were worth only Rs. 70.9 per acre on the fields of non-members in the area.

6.50. The study, therefore, clearly illustrates that higher production was achieved through cooperative farming. In Sambalpur, the variation in the comparative yields achieved on the lands pooled and those cultivated individually was likely to increase, as the societies had invested considerable amounts on land improvement etc., and had built up greater potential for future development.

6.51. (v) *Farm Management*—In the societies of type I, as indicated earlier, it was the expectation of better management which motivated their organisation. This expectation was, however, yet to be fulfilled: members retained large portions of land for individual cultivation and there were also a number of absentees and non-working members. In Mahanad society, the consequences were serious, the landless members leaving the society. Despite this, the case-studies indicate that a beginning was being made to improve the lands pooled. Formerly these lands were completely neglected

6.52. The societies of type II illustrate a better level of management. In Sambalpur, the efforts made to impart training of office bearers, through camps at the block level, had led to a greater awareness of management techniques.

6.53. Despite partial pooling in some societies, care was taken to manage the lands efficiently. In most cases, the lands pooled in the society were being used more intensively than those retained by members for individual cultivation. Thus, in Amarjeevan society, the land-use intensity ratio was 193 per cent, as compared with 108 per cent on the lands retained by members for individual cultivation and 109 per cent on the lands of non-members.

6.54. Whilst the case-studies do not indicate the nature of the economies, if any, effected after the organisation of the societies, it is evident that the lands pooled were compactly situated. In certain cases, as in the societies of type I, and in Amarjeevan, Pradhan and Annapurna of type II, only those lands were pooled which formed a compact block. In the other societies, however, it is clear that the pooling of lands led to a reduction in the number of plots to be cultivated. Thus, in Mithangaon, the number of units to be cultivated was reduced from 13 to 2, in Lokia from 10 to 1, in Bansgaon from 12 to 3 and in Lakhanpur from 12 to 5.

6.55. (vi) *Employment*—In the societies of type I, Jagannath provided an average of 100 man-days of employment to each member. In Mahanad, on the other hand, members neither participated themselves nor was employment potential created by the society, much of the 40 acres pooled remaining under-developed. Amongst the societies of type II similarly where lands pooled were only a fraction of the total land owning of members, employment on the farm was limited. Thus, in Amarjeevan, the report indicates that members were provided little employment on the farm. In Pradhan, whilst 14/16 persons representing the working force of members and their families participated in farm operations, employment was limited as only 31 acres had been pooled. As regards the other societies of this type, details are not available. Study indicates, however, that whilst most of the members participated in farm operations, the degree of employment provided varied according to the extent of land available.

6.56. Of the societies studied, only 2 had started subsidiary activities. In Mithagaon, the society was running a small dairying unit, 4 buffaloes having been obtained through the Utkal Gomangal Samiti. In addition, the society had formulated a plan for the keeping of poultry. Lakhanpur society was operating a small poultry unit, and was proposing to start a dairying unit.

6.57. *Returns to members and distribution of profits*—Details are not indicated in the case-studies regarding the return to members and the techniques adopted in distributing profits.

6.58. *Financial Assistance*—Societies were generally receiving financial assistance from Government along the lines indicated in the existing pattern of assistance. Thus, Jagannath had received Rs. 6,450 at the time of study, Mahanad had received Rs. 7,900, Amarjeevan Rs. 11,900 and Pradhan Rs. 11,150. The 5 other societies of type II, for whom information was subsequently collected, had also received assistance in a similar manner.

6.59. In addition to the assistance provided from the cooperative department, study of the programme in Sambalpur illustrates that the Block and other developmental departments were also assisting the societies. For instance, the Agriculture Department was appointing the societies as retailers for the stocking of chemical fertilizers. As the societies used these fertilizers on their own fields, they were saved the additional expenditure that would have been incurred in purchasing and transporting fertilizers from some other retailer's depot. In addition, the Agriculture Department was, in many cases, purchasing the seed produced by the societies at a premium and distributing it subsequently in the area. Similarly, the Animal Husbandry Department had given priority to cooperative farming societies in the supply of buffalo calves.

6.60. The Central Cooperative Bank played a notable part in promoting cooperative farming in Sambalpur district. By providing prompt and timely finance, the Bank was largely instrumental for the rapid growth of the programme. Study indicates that the Bank was providing both short and medium term loans, on the basis of the production plans formulated by the societies in consultation with technical staff of the district. In 1962-63, the Bank advanced Rs. 52,389 as short-term loan to the cooperative farming societies. In 1963-64, the amount rose to Rs. 1,12,032. In addition, in 1962-63, co-operative farming societies were provided medium-term loans amounting to Rs. 10,973 for the purchase of bullocks and the improvement of land. In 1963-64, such loans increased to Rs. 30,037. In 1964-65, it was anticipated that the Bank would advance over Rs. 1,00,000 as medium-term loans to the cooperative farming societies of the district. Out of the 33 cooperative farming societies in Sambalpur that had been affiliated to the Central Bank 28 had been financed according to their production plans. It had been observed by the Bank that the record of repayment of the societies was good and that no overdues had accrued.

6.61. In Cuttack, whilst short-term credit had been provided to the societies studied, the Bank was yet to play the crucial role that it had assumed in Sambalpur.

Long-term loans were not yet being provided to the societies.

6.62. *Technical Guidance*—In Orissa, at the state level, a Special Officer has been appointed to assist the Registrar of Cooperative Societies in the guidance of this programme. He has been drawn from the Agriculture Department.

6.63. In Sambalpur, the Cooperative Department had taken steps to strengthen the technical staff for this programme in view of the large number of societies that had been formed. In addition to the general-line Assistant Registrar, 3 Sub-Assitsant Registrars, 2 Agriculture Overseers and 3 Farm Inspectors had been posted in Bargarh Tehsil to assist in the programme.

6.64. Technical guidance was also provided by project staff posted under the IADP programme. Just as the cultivators of the area were drawn to cooperative farming as a technique for better utilization of resources and facilities, so the project staff experienced that it was both easier, and more worthwhile, to plan and assist a group of organized cultivators rather than a number of such cultivators especially where their individual cultivation suffered from inherent deficiencies of size and capacity. To illustrate the nature of the technical guidance offered, the following points may be mentioned.

(i) *Production Plans*—These were being prepared under the guidance of the extension officers for agriculture and co-operation. In certain cases, the Assistant Registrar personally helped in the preparation of these plans. The District Agriculture Officer was also required to offer advice concerning them. The Assistant Registrar held a joint meeting of members of the societies and the project staff before each crop. The production plans and requisites of individual societies were discussed and finalised.

(ii) *Production Requisites*—Apart from credit, which was provided on the basis of the production plans, seeds, implements pesticides etc. were also met in adequate measure from the Block and Agriculture Department. As regards fertilizers, the method followed for their distribution has already been indicated.

(iii) *Seed Multiplication*—A programme was formulated for seed multiplication in the district. Selected cooperative farming societies were provided with foundation stocks. After multiplication, the seeds were purchased by the Agriculture Department, at a premium for further distribution.

(iv) *Animal Husbandry*—Whilst considerable scope exists, a beginning had been made to encourage dairying. The Animal Husbandry Department arranged for the supply of 89 buffalo calves to 19 cooperative farming societies in this district.

6.65. As is evident from this, the arrangements for technical guidance in Sambalpur were more satisfactory than in other districts, and offer many suggestions for emulation in other areas.

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CHAPTER VII

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, JORHAT, FOR THE STATE OF ASSAM

ASSAM

The Jorhat Agro-Economic Research Centre made a study of cooperative farming societies in two pilot projects of Assam *viz.*, Golaghat (East), in Sibsagar district and Kaliabor in Nowgong district. In all, 5 societies were studied. These included 2 joint farming societies, pilot and 1 non-pilot collective farming society in Sibsagar district, and 1 pilot joint farming society and 1 non-pilot collective farming society in Nowgong district. The case studies cover the period of working societies till the time of investigation in January, 1964. The pilot societies had been working for over two years and non-pilot societies for more than seven years.

7.2. The societies studied may be classified in the following types:

Type I—Societies formed of small and medium cultivators, closely bound by ties of kinship and caste. There was one society of this type (Titabor), in Golaghat (East) project, Sibsagar district.

Type II—Societies formed of small and medium cultivators and one or two bigger land owners. These included two pilot societies (Suratwal and Rajlakshmi), one in Golaghat (East) project, Sibsagar district, and the other in Kaliabor Project, Nowgong district.

Type III—Collective farming societies formed primarily on Government waste lands. These included two non-pilot societies, one each in Sibsagar and Nowgong districts (Krishnaguri and Chandravati).

Except for one society, (Titabor), the membership of each of the other societies was drawn from more than one community.

The various aspects of the programme may now be considered.

7.3. *Leadership*—The societies of types I and II were formed at the joint initiative of the Anchalik Panchayats and the officials of the Cooperative Department. The secretaries of the societies provided the leadership in bringing together the households, they also wielded considerable influence in decision-making. Whilst each society was managed by a Board of Directors with seven members, the State Government was also generally represented on the Board by a Dy. Cooperative Officer. The average attendance of members in the meetings of the Board of Directors was reported to be 100 per cent in the case of two societies, *viz.*, Titabor (type I) and Suratwal (type II). In Rajlakshmi (type II), the members of the Board took less interest.

In one society of Type III (Chandravati) the members of the managing committee had little say and the will of the Secretary dominated the society. The society ran into heavy loss owing to mismanagement and ceased functioning after 5 years. in spite of the preferential treatment received from Government and the Central Cooperative Bank. The other society of Type III (Krishnaguri). however. had capable leadership, that inspired members to work harmoniously and with enthusiasm.

7.4. *Membership—Identification with Society and Motivation*—The typological characteristics of societies illustrate the degree of identification of members with their societies. as also the motives leading to their formation. Thus. in the society of Type I. in which small and medium cultivators joined together. there were 17 members belonging to 14 households. All the members belonged to a backward Hindu community and 5 of them were interrelated. 14/17 members participated in farm operations. Out of the 69.89 acres of land owned by them. the members pooled 49.01 acres, retaining 20.88 acres (30%) of their land for individual cultivation. In addition, members sold 20 of their bullocks to the society for Rs. 2,180. Some wooden ploughs were pooled. Whilst the members worked in harmony in 1961-62. at the time of study. difficulties were arising owing to the lack of efficient leadership. and some members were reverting to individual cultivation.

7.5. Amongst the societies of type II. Suratwal had 18 members, drawn from 13 house-holds. 13/16 members participated in farm operations. They had pooled 44.7 acres (75%) out of their total land holding of 58.96 acres. The members retained 14.50 acres, (25%). of their land. This included only 7.66 acres that were sown. The remaining 6.83 acres were homesteads and current fallow. All the house-holds had medium or small cultivating units. with the exception of one household. comprising father and son. who pooled 16.03 acres and retained 1 acre for personal cultivation. The members sold 20 bullocks to the society for which they received Rs. 2.690. They also pooled some implements. The report indicates that whilst operations like preparation of the soil. transplanting etc., were undertaken jointly, members harvested their fields individually. In the other society of this type. (Rajlakshmi) 16 members from 15 house-holds pooled only 33.55 acres (26%) of cultivable land. out of the 130.20 acres owned by them. 59 per cent of their holdings were retained for personal cultivation and 15 per cent were to be leased. The land pooled was un-irrigated. Members did not pool their bullocks or agricultural implements. 8/16 members are reported to have participated in farm operations.

7.6. As may be seen from this. in each of the joint farming societies, member-identification was incomplete. Both in Titabor and Suratwal. members were following practices of individual cultivation. In Rajlakshmi. the land pooled was so little that any effective joint management was impossible. Both in Titabor and Suratwal. members did not fully understand the implications of joint farming. Whilst they had pooled most of their land. the study indicates that they were chiefly interested in obtaining financial assistance. As a result. after this was received. the sense of joint effort further weakened. In

Rajlakshmi, the members felt that by forming a society, they would be able to start a brick kiln. The prospect of joint cultivation was not the chief motive leading to their forming the society. As a result, the major portion of their holdings were not pooled.

7.7. The two collective farming societies of type III were organised primarily on Government waste lands. Krishnaguri society was organised with 24 members drawn from 23 house-holds. At the time of study, there were 23 members belonging to 22 house-holds. 15 members worked on the farm. 7 of the households were landless and 14 and small cultivating units, totalling 24 acres; these lands had not been pooled in the society. The other society of Type III (Chandravati) was originally allotted 118 acres of grazing land by Government. There were 137 members and the society had under its management 253.52 acres an additional 106.39 acres having been pooled by members, 7.80 acres having been taken on lease from non-members and 26.33 acres being owned by the society. The society was, however, now defunct.

7.8. *Agricultural Production*—The performance of societies in respect of agricultural production is analysed below:

(i) *Increased irrigation*—

7.9. Titabor society (type I) did not make any efforts to develop its irrigation potential. Amongst the societies of type II, Suratwal spent Rs. 500 on the digging of a tank, and Rajlakshmi dug four 'kachha' wells and sank a tubewell. Data regarding the societies of type III are not available.

(ii) *Land development*—

7.10. The societies of types I and II did not take any significant steps to develop their lands. As the plots of the societies remained scattered, it was also more difficult to improve them. Both the collective farming societies, however, reclaimed the waste lands allotted to them. Krishnaguri had brought under cultivation 66 acres, whilst Chandravati was able to cultivate 100/113 acres allotted to it.

(iii) *Improved practices and productivity*—

7.11. Before the formation of Titabor society, (type I), members did not use improved seeds or fertilisers. Both these practices were introduced after formation of the society. The society also introduced a new paddy crop (Ahu) and hired a tractor to prepare the field for this purpose. The average per acre yield of the major crop, sali paddy, rose from 4.63 quintals in 1961-62, (when there was individual cultivation), to 7.09 quintals in 1962-63. Similarly, the two societies of type II, (Suratwal and Rajlakshmi), also introduced the use of chemical fertilisers and improved seeds. In addition, Suratwal society purchased 6 mould board ploughs. Rajlakshmi society purchased three iron ploughs and one paddy grinding machine. As a result of improved practices in Suratwal society, the average per acre yield of sali paddy rose from 6.27 quintals in 1961-62 to 7.73 quintals in 1962-63. In Rajlakshmi, the average per acre yield of sali paddy rose to 13.5 quintals in 1962-63 as compared with 5.66 quintals in

1961-62, Krishnaguri society (type III) achieved considerable success in increasing production through intensification of farming operations and crop diversification. Though the net area of the society is only 66 acres, it had succeeded in double cropping all its land and treble cropping some of it. Thus, while its gross cropped area was 93 acres in 1960-61, it rose to 155 acres in 1962-63. Whilst the area under paddy and pulses remained nearly constant, the society greatly increased the area sown with mustard and jute. In addition, sugar cane cultivation was introduced, in 1962-63, on 30 acres.

7.12. *Farm Management*—In all the societies case-studied, except Krishnaguri, the quality of management left much to be desired. The data available in the report indicate that accounts were poorly maintained. In Titabore (type I), details regarding production data did not find mention in the accounts books of the society. Instead, data were collected through discussions with the management of the society. Thus, whilst the accounts of the society show a loss of Rs. 2,259.78 in 1962-63, the report states that either the total production for the year had not been valued, or the cost of production had been inflated.

7.13. As regards Suratwal, too, the report states that the accounts were obviously fictitious. Whilst harvesting was done individually, the value of crops grown was Rs. 5,490 in 1961-62 and Rs. 6,710 in 1962-63. Had these amounts been shown in the production and trading account, there would have been profits, instead of losses, in these years. The report states that the losses shown in the accounts are fictitious.

7.14. In Rajlakshmi, the accounts of the society did not reflect any transactions relating to agricultural business. No mention was made either of farm expenses or of farm production. The audit notes of the society had also pointed out a number of irregularities. The chairman spent the resources of the society without consulting the managing committee. The society, therefore, had little cooperative character. Similarly, in Chandravati, accounts were poorly kept: this led to disintegration of the society.

7.15. The weakness in the management of joint farming societies is also illustrated in the inability of these socities to effect any economies of scale. Apart from the fact that lands remained scattered and partially pooled, the joint farming societies did not make any efforts to rationalise their bullock strength etc. On the contrary, in certain cases, the societies bought more bullocks than needed from the members. Thus, in Titabor, the members sold 20 bullocks and 1 he-buflalo to the society. As the land pooled was only 49.01 acres, of which only 44 acres were cultivated, some bullock power remained idle. Similarly, in Suratwal, the members sold 20 bullocks to the society, which also purchased 2 more from elsewhere. As the land cultivated was only 36.33 acres, out of the 49.46 acres pooled, there was considerable wastage of bullock power.

7.16. *Employment*—The report indicates that the societies of types I and II failed to provide much additional employment. In Titabor

(Type I), although the 14 members were small and medium cultivators. the society could provide work in agricultural operations for only 153 mandays in 1961-62 and 1255 days in 1962-63. In non-agricultural operations, it provided only 34 mandays in 1961-62 and 32 mandays in 1962-63. The lack of employment resulted, chiefly, from the inadequate size of the farm. Under these conditions, subsidiary activities should have been developed. Whilst weaving would have proved a suitable craft, as members and their families were skilled in it, little was done to organise this activity.

7.17. In Suratwal (type II), the position was in no way better. In 1961-62, the 12 working members of the society were provided employment of only 251 mandays in agricultural work; in 1962-63, 601 mandays were provided. In this society, the land-man ratio was even more adverse than in Titabor, and the piggery unit that was started, was soon abandoned.

7.18. In Rajlakshmi society (type II), though only 33 acres were pooled by 16 members, employment provided by the society was more than in Titabor and Suratwal. Thus, in 1962-63, Rajlakshmi provided 461 mandays in agricultural operations and 1,770 mandays in non-agricultural operations. Whilst members and their families worked only for 340 days in agricultral operations and only 17 days in non-agricultural operations, it is evident that the brick kiln started by the society resulted in increasing employment, chiefly to the non-members.

7.19. Krishnaguri society (type III), however, provided whole-time employment to 14 members and one member worked for 144 days. In 1962-63, the number of mandays provided to members and their families was 4,947. The society did not employ casual labour, though working members were paid at the rate of Rs. 3.50 per day, which was a rupee higher than the prevailing rate. No data are available regarding the other society of type III.

7.20. *Subsidiary Industries*—As indicated, 3 societies undertook subsidiary activities, though the results were unsatisfactory. Titabor society (type I) purchased seven fly shuttle-looms and yarn worth Rs. 200. Four households of members already possessed 4 more shuttle looms. The society, however, failed to organise production for want of resources. Whilst Rajlakshmi started a brick kiln, it did not get a loan in time. As a result, it failed to mould the bricks before the monsoon and one lakh bricks were damaged. The society then purchased a husking machine which was expected to start functioning in the next harvest season. Suratwal society started a small piggery. It purchased 14 pigs at a cost of Rs. 900, but could not afford to construct a pig shed for want of money. A few pigs died and, being frightened by the prospect of total loss, the society sold the entire herd.

7.21. *Financial Assistance*—All the societies studied received financial assistance from the Cooperative Department. No financial assistance was, however, forthcoming either from the Central Cooperative Banks or the other Departments, except to Chandravati (Type III) which was over-financed. The society received Rs. 1,60.000 as loan from the Central Cooperative Bank, out of which Rs. 1,30,000 became overdue. The society incurred heavy losses—Rs. 32,223 in 1958-59 and Rs. 21,648.32 in 1959-60. The study holds the managing committee responsible for this mismanagement.

7.22. *Technical Guidance*—While opinions about the activities of the Block Development Officer were generally favourable, it was noticed that adequate technical know-how was not given to the societies. The staff of the Cooperative Department also did not provide adequate technical guidance with the result that the accounts of the societies were not properly maintained and reliable data about production and distribution were not available from the books of the societies.

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CHAPTER VIII

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, VALLABH VIDYANAGAR FOR THE STATES OF RAJASTHAN AND GUJARAT.

The Anand Agro-Economic Research Centre made a study of the programme in the states of Rajasthan and Gujarat. In total, 23 co-operative farming societies were studied. These included 12 joint farming societies and 9 collective farming societies organised in 4 pilot projects and 2 non-pilot societies, one of which practiced joint farming and the other collective farming.

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8.2. State-wise, the number of societies studied was as follows:—

State	Joint farming societies		Collective farming societies		Total
	Pilot	Non-pilot	Pilot	Non-pilot	
1	2	3	4	5	6
Rajasthan	7	1	6	1	15
Gujarat	5	..	3	..	8
TOTAL ..	12	1	9	1	23

8.3. Of these 23 societies, 5 had been functioning for over 3 years and 15 had been in existence for either 1 or 2 full agricultural years. In Umerain block (Rajasthan), however, 3/6 societies studied were organised in 1962-63. It was, therefore, possible to obtain data regarding them only for one agricultural season.

8.4. Unlike the other agro-economic research centres, the Anand Centre did not adopt the case-study method of investigation. Instead, it devised four schedules: (i), a society schedule, which sought information regarding various aspects of organisation, operation and management; (ii), a household schedule for members and non-members, which collected information regarding their economic condition and the gains, if any, accruing to members after formation of the societies; (iii), an opinion and attitudes schedule, canvassed separately for members and non-members; and (iv), a village schedule, seeking background data for the areas in which the societies were located. In addition, the views of both officials and non-officials associated with the programme were elicited.

8.5. In the absence of case-studies, the societies surveyed cannot be classified in terms of the land-owning status of members. Though data are available regarding the total membership per society and the area pooled, the report does not provide member-wise details, (in the case of joint farming societies), of the lands owned, pooled, or retained for individual cultivation. In view of this, a classification in terms of land available per member, is also not meaningful; this is particularly so as, in certain societies, membership was heterogeneous, land contributed member-wise varied considerably and certain landless members were also enrolled: in other cases, the lands pooled represented only a portion of the total lands owned by members. Similarly, as the report does not provide detailed data regarding the *inter-se*-relationship of members, classification of societies in terms of the number of families, or independent cultivating units, are not possible.

8.6. On the other hand, the report includes valuable data regarding the leadership provided for the programme. Both in Rajasthan and Gujarat the initiative in organising and guiding societies was largely taken by non-official. The working of societies reflects this leadership. Broadly, therefore, these societies may be classified as follows: —

Type I—Societies in which the initiative was provided by traditional leaders of certain landless communities, who felt that cooperative farming was necessary for their betterment;

Type II—Societies organised primarily through the efforts of social and political workers;

Type III—Societies formed chiefly by young and educated farmers who were keen to introduce new ideas and do something worthwhile in their villages; and

Type IV—Societies formed principally on official initiative.

8.7. Whilst, for purposes of analysis, the societies studied may conveniently be classified in this manner, the distinction between these types was not rigid. Thus, there was frequently an interplay of types of leadership. For example, the traditional leaders of Sardhana Society (Type I), who were members of the backward classes. sought the help of a Minister to add weight to their requests for land and production requisites. Similarly, the members of Durgakhel Society (Type I), looked to an M.L.A. to shorten procedural delays in certain matters facing them. In addition, official workers in the field frequently assisted the non-official leadership. Thus, following discussions amongst themselves, the prospective members generally sought the advice of local officials. The reports, however, clearly indicates that initiative in promotion was provided by non-officials; nowhere was there any evidence of official coercion.

8.8. *Membership: Identification with Society and Motivation*—The leadership characteristics of societies may now be related to a study of their membership and motivation.

Of the 10 collective farming societies surveyed, 7 belonged to type I and 3 to type II. The societies of type I included all 6 societies studied in Umerian block and 1 society of Sajat Block (Rajasthan). 5 of the societies of the former block and the 1 society the latter block were composed of members drawn from a single caste. Of these, in all but one, membership was drawn from the scheduled castes or scheduled tribes. Only 1 society of this type had a multi-caste membership.

8.9. Almost without exception, the members of these societies were landless at the time of organisation. The few who owned land had sub-marginal holdings. There was, therefore, a high degree of social homogeneity, heightened, in the majority of cases, by ties of castes and kinship. In each group, there was a traditionally accepted leader, who, either as president or secretary guided the society, consulting other members on matters of importance. In the one multi-caste society, each caste group was represented on the managing committee.

8.10. As is to be expected, therefore, these societies generally illustrated a great deal of cohesion. Of the 37 members of Umerain block whose opinions were canvassed, 26 rated their leadership as good, 4 as fair, and 4 as excellent. Only 2 members, (of the multi-caste society), thought the leadership poor, whilst one member, also from this society, did not opine. The same quality of cohesion is illustrated in the conduct of work. The report indicates that nearly all the members participated in farm operations and, with the exception of 3 members, the other 34 members opined that they were satisfied with the method of work allotment and supervision.

8.11. The report reveals that most of the members of these societies, being landless, were motivated by a desire to raise their status. through the ownership of land. Their leaders convinced them of the benefits of collective ownership. The society, therefore, owned the land and most of the implements used. Cattle, however, though notionally pooled (in order to raise share capital), was being maintained by individual members. It was felt that the cattle would be better cared for in this manner. Whilst the degree of member identification varied from society to society, by and large, the report concludes that cooperative principles were followed more completely in these societies than in the others studied in Rajasthan and Gujarat.

8.12. At this stage, a distinction may be drawn between two aspects of leadership: one, which inspires members to a genuine sense of cooperative activity, and the other, which leads to efficient planning and management. Whilst the leaders of the collective farming societies of Rajasthan possessed the former attribute, they were deficient in the latter. Being drawn chiefly from the backward classes, they were generally illiterate and lacked experience in running a farm. As a result, management left much to be desired, particularly the maintenance of records. In spite of this, the leaders enjoyed the confidence of members. In comparison, the collective societies of Gujarat (Tpye II) were well managed, but the leadership, though drawn from enlightened and conscientious social workers, sometimes found that a gulf existed between itself and the rank-and-file members. This was particularly so when the leaders did not reside in the village in which the society was formed. The study, therefore, points to the need for creating a leadership that is, at the same time, enlightened efficient and local.

8.13. Of the 3 collective farming societies of Savarkundla block (type II) Datanagar and Letanagar were formed, chiefly, owing to the efforts of workers of the Gram Seva Mandal, a non-official organisation working in the area. As regards Girgaon, the initiative came from a worker of the Khadi and Village Industries Commission, who was encouraged by the MLA of the area. Whilst the leaders of Datanagar resided in the village itself, the leaders of Letanagar and Girgaon lived in villages other than those in which the societies were located.

8.14. Whilst all 3 societies were efficiently managed, the leadership of Datanagar was closest to the members. As such, the most constructive work was done in this society. It is also significant that the membership and area of this society had increased over the past 3 years. In Letanagar, on the other hand, a dispute had arisen between the president and the members regarding the wage rate to be followed. The president, motivated by a desire to help the society out of its teething troubles, adopted a policy of paying a lower wage than the market rate. The other members resented his decision.

8.15. Each of these societies was multi-caste in character. In Datanagar and Girgaon, there were both Hindus of various castes and Muslims. The report, however, specifically mentions that the affairs of the societies were not influenced by caste rivalries or conflicts. As nearly all the members were landless, they shared a common approach to their problems and most of them participated in the work of the society.

8.16. None of the 13 joint farming societies studied, had leadership of type I. Their classification, too, is more difficult in the absence of case-studies. The report, however, mentions that 1 joint farming society of Sojat Block, (Ambikaji), owed its formation to the efforts of a social worker of the Congress party. Similarly, in Savarkundla, 3 of the 4 joint farming societies were also organised through the effort of social workers. Azad and Bhagatpur societies were inspired by the local MLA, and Narsipur owed its origin to the efforts of the Gram Seva Mandal. These societies, may, therefore, also be classified in type II.

8.17. From the point of view of organisational characteristics, however, these societies varied widely. Thus, whilst Ambikaji was a single caste society and all 15 members were landowners, the societies of Savarkundla were multi-caste and landless members had also been enrolled. Whilst, in Ambikaji, only a fraction of the lands owned were pooled, the Savarkundla societies had pooled most of the lands owned by members. Booth in Ambikaji and in the Savarkundla groups, however, members-identification with the societies was incomplete. In the former, partial pooling affected interest in the cooperative farm. In Savarkundla, 90 per cent of the land pooled in Azad society had been contributed by one family. Though the society was functioning efficiently, the 4 landless members were dissatisfied with their share of the income. In Bhagatpur, as the leadership was from 'outside', the society relapsed into a moribund condition soon after the initial enthusiasm waned.

8.18. In type III, *i.e.*, societies formed chiefly by young and educated farmers, may be included 6 joint farming societies of Sojat block (Chandrawat, Suryapur, Roopnagar, Rajawas, Khera and Rajdhani) and 1 of Kalol block (Narayanswami). Each of these societies was multi-caste in character except Chandrawat and Rajdhani. In the former, members were closely related. In all the Sojat societies, members had only partially pooled their lands. In certain cases *e.g.*

Suryapur, only the inferior lands had been pooled. Whilst members generally participated in farm operations, in one society, *i.e.* Roopnagar. as the land-owning member belonged to the families of former Jagirdars, they did no manual work.

8.19. In contrast, Narayanaswami society once had a very high degree of member-participation and worked as a model in its area. Its decline, after a promising start, offers many lessons. Started with 38 members in 1960-61, who pooled their entire holdings of 172.54 acres, Narayanaswami had the leadership of a young president and secretary who were determined to step up production in their village through scientific agriculture. After a period of successful functioning, in which work was carefully planned and efficiently assessed, a variety of internal problem developed. Thus, the president, who had pooled the most land in the society, felt his land dividend was inadequate and wanted to be compensated by a higher wage-rate than others. Non-working members, similarly were disappointed with their land dividend; some wage earners, on the other hand, took advances and quit the society before adjusting their accounts. In addition, members found it impossible to raise resources for social and religious purposes once they had pooled their lands. As a result, over a period of 3 years, this society had seen the withdrawal of the original president and 22 other members. At present, it continued functioning with 16 members and 121 acres of pooled land.

8.20. Whilst members of the societies falling in this type were drawn to cooperative farming for the higher incomes and better production which it offered, in many cases, this implied a desire to achieve this end through financial assistance from Government. Thus, in Sojat block, 32/48 members whose opinions were canvassed, stated that they joined the societies in order to raise such resources. In certain cases, members were also motivated by a desire to circumvent land reforms measures. In Kalol, on the other hand, most members of Narayanaswami hoped that formation of the society would lead to an increase in incomes resulting from new techniques that would generate employment.

8.21. 2 societies are mentioned in which the initiative was provided chiefly by officials. Aryunpur society (Sojat) is stated to have been registered in order to satisfy official targets. The report indicates that members displayed incomplete understanding of the principles of cooperative farming. Janta society, (Savarkundla), was similar in nature, though. as it had been recently formed, data regarding it were not available.

8.22. *Agricultural production*—The performance of societies in agricultural production was largely determined by the nature of land and resources available. In each area, conditions varied and with them the priorities directing the attention of members. Thus, in Umerain and Savarkundla blocks, where most societies were formed on waste lands, land reclamation was the major problem, only thereafter could other improvements be made. The measures taken by societies to increase agricultural production are indicated below:

8.23. (i) *Land Improvement*—The 6 collective farming societies of type I, formed in Umerain block, had a total area of 859.5 acres.

The lands were allotted unreclaimed to the societies. The report indicates that, generally, the members had to clear the land with their own labour and tools. They were not assisted either financially or with equipment from Government. In Bahadurgarh II society, 39 per cent of the total area was cultivated, the area sown in the other societies varied between 46 per cent—68 per cent of the lands allotted. Only one society, *viz.*, Sardhana, was able to raise a loan, (Rs. 3,000), for the reclamation of land—this, too, was obtained from a private agency. The loan was raised by the members in their personal capacities and used for reclamation of the society's lands. It was repaid in 2 seasons. Under these conditions, the reclamation of land, was as the report says, a heroic effort.

8.24. In addition, bunding was undertaken by these societies of 12.35 acres in 1961-62, 34.58 acres in 1962-63 and 17.29 acres in 1963-64. This, too, was done by the members themselves and no remuneration was claimed for this work.

8.25. The 3 collective farming societies of type II, formed in Savarkundla, were faced with similar problems. The report indicates that, out of the total area of 521.17 acres belonging to them, 236.27 acres were being sown. This area included 148.2 acres that had not been cultivated before and 76.5 acres that had been purchased by the societies in order to improve their lands man ratios. Similarly, 2 of the these societies undertook bunding in an area of 79.7 acres. Whilst the report indicates that financial assistance was provided under the pilot project scheme, it states that this was inadequate when related to the actual requirements needed for capital investment. Even so, the members of these societies freely stated that they would not have been able to cultivate these lands had they attempted to do so individually.

8.26. Turning now to the joint farming societies, the report indicates that amongst the societies of type II, Ambikaji (Sojat) had raised bunds to prevent water seepage. The cost of Rs. 640 was raised from the members. In Savarkundla, of the 3 societies of this type, Bhagatpur is reported to have bunded 39.5 acres at a cost of Rs. 348. As regards the 7 joint farming societies of type III, 2 in Sojat block had undertaken fencing to safeguard their farms from cattle trespass. Similarly, 1 society of type IV had also fenced its fields.

8.27. (ii) *Increased Irrigation*—The report clearly illustrates the importance given to increasing irrigation in the societies studied. Whilst the investment capacity of the collective farming societies, both of type I and II, was limited, many of them had taken steps to improve their irrigation facilities. Thus, whilst hardly any irrigation existed in these areas before the societies were formed, by the time of study, 4/6 pilot societies had begun constructing wells, using the loan provided by Government under the scheme. In Savarkundla, 2 collective farming societies had invested in irrigation. They had incurred an expenditure of Rs. 4,845 on wells and Rs. 9,900 on the purchase of oil engines and pumping sets. In addition, in this area, the joint farming societies of (type II) had invested a further Rs. 8,300 on wells and Rs. 4,300 on oil engines and pumping sets. As a result, the cooperative farming societies of Savarkundla had, in the short period of their existence, brought under irrigation an additional 360.8 acres. The money for this purpose had mainly been provided under the existing pattern of assistance. Ambikaji society (Sojat), which was also of this type, invested Rs. 6,000 on irrigation.

8.28. The societies of type III, illustrate a similar emphasis. In Sojat project, where this was an absolute necessity, the 6 joint farming societies of type III had spent over Rs. 20,000 adding to their irrigation facilities. In addition, Narayanaswami society had, at the time of its inception, pooled 12 wells belonging to members. 3 of these wells were instantly fitted with pump sets, at a cost of Rs. 16,000. Though, with the withdrawal of members, some of these wells were also withdrawn, it is significant that the society paid first priority to increasing irrigation. No specific mention is made of the steps taken by the societies of type IV to increase irrigation.

8.29. (iii) *Improved Practices*—The capacity of the societies of type I to introduce improved practices was limited by their lack of resources and, to some extent, by the inadequate nature of technical guidance. Inputs in Umerain block, therefore, varied between Rs. 17 and Rs. 28.7 per acre. Apart from expenses on fodder, expenditure on seeds constituted a high percentage of the inputs. As much of the land was unreclaimed, and irrigation facilities totally absent in the area, the practices followed were generally traditional. However, the report indicates that the societies were beginning to introduce more scientific crop rotations, line sowing and inter-cultural operations. Though fertilizers were not being used, members were keen to use organic manures. At the time of the study, however, only Sardhana society had used manures. The report also points to a shortage of traction power in some of these societies, as the members did not have adequate resources to purchase bullocks. On the other hand, Bahadurgarh I society had purchased a tractor: whilst this facilitated the cultivation of barren land, the area of the society did not permit its optimum utilisation. The study, therefore, emphasises the need for more comprehensive assistance both for the reclamation of land and for the purchase of bullocks. At the same time, it cautions against the purchase of a tractor where resources, both of land and capital, are scarce.

8.30. In Savarkundla block, the collective farming societies (type II) were in a relative better position. Thus, the inputs per acre were worth Rs. 114 in the case of Datanagar, Rs. 57 in Girgaon and Rs. 45.7 in Letanagar. Girgaon and Letanagar used fertilizers, whilst Datanagar used farm manures. Whilst the quantum of fertilizers used was still small, the members intended using them more liberally as irrigation facilities increased. The report also mentions that all the societies used improved cotton and groundnut seed, these were the two major crops sown. Insecticides, too, were used. Apart from the expenditure already indicated on irrigation, all 3 collective farming societies had invested in improved agricultural implements and farm machinery. The expenditure incurred for this purpose totalled Rs. 4,169. As regards traction power, however. difficulty was being experienced in these societies as well. Thus, in Letanagar society, there was only one pair of bullocks, though the area sown was 120 acres.

8.31. The joint farming societies of type II, situated in Savarkundla block, illustrate similar trends in regard to use of fertilizers, improved seed and insecticides. As their irrigation facilities were better developed, the cropping patterns adopted were also more diversified. The importance of irrigation is reflected in the comparative yields. Thus, in Azad society, where 20 per cent of the area sown was irrigated, the value of per acre output was more than three times that of Datanagar society, where only 3.9 per cent of the area sown was irrigated. In contrast to the collective farming society, the joint farming societies were also better equipped with bullocks and implements. Azad and Bhagatpur, for whom information is available, had spent approximately Rs. 4,500 each on the purchase of improved implements farm machinery.

8.32. In Sojat block, the societies of type III illustrated few improved practices. The scarcity of water and near famine conditions were partly responsible for this situation. In part, however, this resulted from an incomplete identification of members with their societies and the absence of technical guidance. Thus, the study reveals that certain societies had inadequate traction power and implements because members had retained sizeable holdings for individual cultivation. To avoid this difficulty, 3 societies (2 of type III and 1 of type IV) had purchased tractors. The maintenance of these tractors was proving uneconomical as the area of each society was not enough. The report indicates that only 2 societies used fertilizers and 4 used manures. Little improved seed was used and implements, too, were traditional. In contrast, in Narayanaswami society, a variety of improved practices were adopted. These included better sowing practices and the use of fertilizers and insecticides. The society had also invested in improved agricultural implements and a tractor. However, because of internal disputes and the withdrawal of some members, the tempo of work was slackening.

8.33. (iv) *Productivity*—The production results of societies varied widely. As is to be expected, yields were lowest in the collective farming societies of Umerain block (type I). In one of these, only 39 per cent of the total area was sown; in the others, the sown area varied from 46 per cent—68 per cent of the land pooled. In the short period of their existence, these societies had not been able to resolve the many problems facing them. Thus, in Sanganer 1 and 2, there was hardly any yield at all, the value of yields per acre being only Rs. 4. In comparison, Sardhana society, which had started 3 years earlier with similar membership and equally stringent resources, had raised its yields to Rs. 92.3 per acre.

8.34. The performance of the collective farming societies of Savarkundla block (type II) was similar. The area sown represented about 50 per cent of the total holding. Yields per acre were still low, *i.e.* they were valued at Rs. 36 in Datanagar and Rs. 47.4 in Girgaon.

8.35. In contrast, in the joint farming societies of this type in Savarkundla both land utilisation and yields were distinctly higher. Thus, in Azad, 67.6 per cent of the total area was cultivated and in Bhagatpur over 90 per cent was sown. Production per acre was worth Rs. 136.7 in Azad and Rs. 85.8 in Bhagatpur. The one society of this type in Sojat Block, *viz.*, Ambikaji, had sown 59 per cent of its total area and yields per acre were worth Rs. 108.5.

8.36. Looking to the performance of societies of type III, the area sown and yields varied considerably. Thus, in Sojat block, whilst Chandrawat and Rajawas had sown only 42 per cent and 33 per cent of their total holdings, yields per acre in these 2 societies were worth Rs. 175.5 and Rs. 231.5 respectively. In the other societies of this type *viz.*, Suryapur, Roopnagar, Khera and Rajdhani, whilst the sown area varied from 59 per cent to 28 per cent of the holding, yields were uniformly low—varying between Rs. 51 per acre in Rajdhani to Rs. 9.5 per acre in Roopnagar. Apart from the shortage of irrigation, the report indicates that severe drought affected this area during the year under survey. As a result, these societies were reduced to famine conditions.

8.37. In Narayanaswami society, the whole of the area pooled was cultivated in each year. The double cropped area was 15 per cent of the total area sown in 1962-63 as against 17.4 per cent in 1961-62. The decline in double cropped area was owing to the withdrawal of certain irrigated plots. In the corresponding years, yields per acre were worth Rs. 210.1 and Rs. 225.1 respectively.

8.38. Data is available regarding only 1 society of type IV, *i.e.*, Aryunpur. As in the case of other societies of Sojat Block, Aryunpur was crippled by drought. Yields per acre were valued at only 7.6.

8.39. *Farm Management*—The quality of leadership determined to a large extent the nature of farm management. Whilst the standard of management in many of the societies surveyed would not satisfy any rigorous criteria, this was, to some extent, the consequence of a general lack of experience and the recent formation of societies. Even so, the societies of type II were run on relatively efficient lines, as the social workers who promoted them were often educated.

The problems of management were diverse. Few societies had trained managers. Amongst those of type I, in Umerain block, only Sanganer 1 and 2 had a manager, and they shared the same person. Deeg, of Sojat block, also had a manager. The societies of type II were in a better position: 2 societies, *viz.*, Datanagar and Azad had efficient managers who maintained the records well and who had an important role in decision-making. In the other societies of this type, though trained managers were not appointed, the leadership itself was better educated. Amongst the societies of type III, though records were generally in better shape than in those of type I, the position varied from society to society. Though trained managers were not appointed, in Chandrawat, the standard of management was satisfactory. In certain others *e.g.*, Khera, however, it was poor. Aryunpur society, of type IV, was reported as having indifferent management.

8.40. The report points to the need for trained managers, particularly in societies organised on waste lands by the weaker sections. This management, however, must be attuned to the local area and the members of the societies. The value of non-official social organisations in providing such managerial skill also emerges as an important conclusion. In this connection, the study indicates that whilst a number of societies were keen to appoint trained managers, the present level of managerial subsidy and the stringest finances of the societies themselves, rendered such appointment difficult.

8.41. The study indicates that practices of management were gradually being evolved, though considerably more thought and guidance is required in this direction. Of all the societies studied, only Narayanaswami had evolved a system of norms for work assessment. In other societies, even where the majority of members participated in farm operations, no work teams were organised, nor was there any systematic division of labour or measurement of work. Instead, societies were, often, grouping towards possible solutions. Thus, in Sardhana society (type I), members who failed to arrive for work, were fined for their absence. Whilst the 2 adjoining societies of Bahadurgarh were also seeking similar solutions, in practice, penalties were not being imposed.

8.42. The report does not specifically indicate the economies of scale, if any, following the organisation of the societies. It does, however, mention that in Savarkundla block, the registration of societies did not lead to any marked decline in the units of cultivation. This was, largely, owing to the nature of the terrain. Whilst the problem was less acute in Azad joint farming society, where only 2 units existed, curiously, it had serious consequences in the collective farming societies. Thus, Datanagar had been allotted lands in 20 places, whilst Letanagar had its holding scattered in 9 plots. As the lands were undulating and unreclaimed, the planning of crops and irrigation facilities became extremely complex. On the other hand, the societies of Sojat block showed a considerable degree of consolidation. Thus, the plots included in Chandrawat society were reduced from 22 to 2, in Rajawas from 12 to 1 and in Ambikaji from 10 to 1.

8.43. The report draws attention to another important managerial aspect of cooperative farming, namely, the need to balance equitably the interests of the landed or the landless. The studies indicate that, in the joint farming societies of Sojat block (mostly belonging to type III), the landless members were inadequately represented on the managing committees and had little voice in the working of the societies. In contrast, in Savarkundla, where the societies belonged generally to type II, the landless members had a clearer say in the management of the societies.

8.44. *Employment and Subsidiary Activities*—The report does not provide details regarding the employment provided to members in farm operations. In the collective farming societies, though the area sown was small, members frequently found employment in reclamation work. In joint farming societies, where land improvement was undertaken chiefly through increasing irrigation and bunding, members devoted relatively more time to farm operations. A study of land available per member, however, reveals the employment potential available.

8.45. In Umerain block, in the 6 societies of type I, land per member varied from 2.86 acres in non-pilot society Durgakhol, to 10.27 acres in Bahadurgarh II. At the time of study, however, the land sown per member varied from only 1.6 acres in Durgakhol society, to 7.96 acres in Sardhana society. In Deeg collective farming society, (Sojat block), the land per member was only 2.76 acres of which only 2.29 acres was sown. In view of the nature of the land allotted to these societies, it is evident that reliance on cultivation alone will leave the members and their families largely under-employed.

8.46. In the societies of type II, the size of the farms was more favourable. Apart from Letanagar society, where the land and area sown per member were 8.57 acres and 5 acres respectively, in the other societies, the land available per member varied from 12.76 acres in Bhagatpur to 32.97 acres in Azad. The area sown per member varied from 5.11 acres in Datanagar to 21.36 acres in Azad. Here again, however, full employment cannot be provided to members in most cases—the lands being underdeveloped and cultivation still being rainfed.

8.47. The societies of type III and IV illustrate the same point. Thus, in Sojat block, the area per member varied from 6.12 acres in Aryunpur to 23 acres in Roopnagar. The area sown per member, however, varied from only 2.76 acres in Rajawas to 10.89 acres in Roopnagar.

8.48. In these circumstances, it is of the utmost importance that the societies formulate schemes for a fuller utilisation of their members' labour. At present, only Datanagar society has attempted to diversify farm activities and to provide additional employment. It has taken up a variety of activities, ranging from dairying and cattle-breeding, to the running of a flour mill and an oil crushing unit. One member was working full time at the flour mill and two were working at the oil crushing unit. In addition, 'ambar charkhas' had been distributed to members to keep them and their families engaged. No exact assessment has been made, however, of the employment provided through this.

8.49. *Financial Assistance*—As indicated earlier, the quantum of financial assistance provided was low, when related to the tasks of development that had to be undertaken. This was particularly so in the case of collective farming societies. Generally, assistance was provided by Government in the manner permitted under the existing pattern of assistance. The societies had used this assistance promptly, but were requiring further resources, particularly for land development and agro-industries. Assistance from Governmental sources was, however, limited to the Cooperative Department. In Savarkundla, on the other hand, funds were also flowing from the Khadi & Village Industries Commission.

8.50. As regards credit from the cooperative financing structure, whilst short-term loans were generally provided according to production needs in Sojat, Savarkundla and Kalol, in Umerain no credit whatsoever was advanced. Detailed information regarding medium and long-term loans is not available, though the difficulties of the societies indicate that they had not received such credit.

8.51. *Returns to Members and Distribution of Profits*—A variety of practices were followed in distributing the gross income of societies. Amongst the societies of type, I, Bahadurgarh II after deducting cash expenses, distributed the remaining income equally amongst members. In Durgakhol, the entire produce was first sold in the market and the proceeds, after meeting farm expenses, were equally distributed amongst members. In Bahadurgarh I, part of the produce was distributed in kind, whilst the rest was sold and the proceeds used for clearing farm expenses. The study points the need for closer guidance to such societies in the techniques of distributing income.

8.52. In Savarkundla, the method adopted by Datanagar society was followed by all others of type II, regardless of whether they were collective farming or joint farming societies. According to this procedure, the first charge on the gross produce was to meet all cash expenses, depreciation in the value of machinery and any losses that had been incurred in the previous year. Thereafter, 25 per cent was set aside out of the remaining income, as contribution to the reserve fund and a small amount was earmarked as contribution towards the education fund, dividend on paid capital and dividend on deposits of members (which were created out of wages earned through working on land development activities). From what remained, 70 per cent was distributed amongst members in proportion to the remuneration for work earned and the remaining 30 per cent was earmarked for bonus to staff, land development and charitable purposes. It is significant that, by adopting this procedure, the joint farming societies dispensed with the payment of return for ownership of land pooled. This is important in determining the character of the societies formed. Thus, whilst Azad and Narsipur are reported to have been formed by a limited number of families, and landless members enrolled to reach the minimum registration requirements, the distribution of income indicates that emphasis was given to work on the land, and not on the amount of land contributed.

8.53. The societies of Sojat, most of which were of type III, followed various practices. Some of them, like Roopnagar and Khera were faced with a failure of crops. Of the others, Chandrawat distributed the produce equally amongst members, after deducting cash expenses. In Rajawas, 1/6th of the gross produce was paid to members who had pooled land, the remaining produce was equally distributed after deducting farm expenses. In Ambikaji (type II), the kharif crop was distributed amongst the landless members, after deducting expenses, and the rabi crop was distributed, after similar deduction, amongst the land owning members. In Kalol block, Narayanaswami society was distributing 1/6th of the gross produce as return on land and thereafter meeting farm expenses.

8.54. *Technical Guidance*—The report indicates that arrangements for technical guidance were better in Gujarat than in Rajasthan. In Rajasthan, a Deputy Registrar and Assistant Registrar (Technical) helped the registration at the state level. At the district level, however, there were no special arrangements, for guidance. The general-line Assistant Registrar supervised the programme. At the block level, 1 Technical Assistant (Farming) was held by 2 gram sevaks in each pilot project.

8.55. In Gujarat, on the other hand, at the state-level, the Special Officer, though of the Cooperative Department, was an agriculture graduate. In the districts in which pilot projects were organised, there was generally one, but sometimes two, Assistant Registrars, to carry out the policies and instructions received from above. In addition, the District Agriculture Officer and Soil Conservation Officer were specifically entrusted with the responsibility of checking production plans and formulating schemes for land improvement. The certificate of the former was also necessary to testify to the suitability of land proposed to be allotted to cooperative farming societies. At the block level, in each pilot project, the Project Officer was assisted by 1 other worker of inspector rank and 1 gram sevak. Where the Project Officer was an agriculture graduate, the inspector was provided by the Cooperative Department, where the Project Officer was from the Cooperative Department, he was assisted by an agriculture inspector.

8.56. The report indicates that, in Gujarat, great pains were taken by the officials in the preparation of production plans and in the exchange of ideas. In Rajasthan, in Umerain block, technical guidance was conspicuously inadequate.

8.57. *Other Points*—Certain other important points emerging from the study may also be mentioned:

(i) *Indebtedness*—In Rajasthan, the members of societies in Umerain block were generally indebted to private money lenders. Even their production finance was obtained from this source. It is imperative that institutionalized finance be made available to them. This finance will have to take into consideration not only their production and land development requirements, but also, to some extent, their consumption needs.

(ii) *Marketing*—In the absence of cooperative marketing, societies were not selling their produce to the best advantage. One significant factor leading to the disintegration of Narayanaswami society was the absence of adequate marketing arrangements. The society was compelled to make distress sales in two consecutive years.

(iii) *Reaction of Members and Non-members*—The report observes that it is still too early to say with any precision whether members have benefited through joint cooperative farming societies. It does, however, mention that, inspite of considerable difficulties, the majority of members opined that they were earning more, and were more fully employed, after joining their societies. Only a small minority felt that they had suffered by becoming members. The report also draws attention to the emergence of a young and enthusiastic non-official leadership in these two states—the majority of members being between 15 and 35 years of age.

CHAPTER IX

SUMMARY OF THE RESULTS OF INVESTIGATION MADE BY AGRO-ECONOMIC RESEARCH CENTRE, GWALIOR, FOR THE STATE OF MADHYA PRADESH

MADHYA PRADESH

The Agro-Economic Research Centre, Gwalior, carried out a study of the programme in Madhya Pradesh. Of the 38 societies in the four pilot projects started in 1961-62, 15 pilot societies in 3 pilot projects were selected for case study. In addition, 2 old societies were also studied. The number and types of societies studied project-wise are given below·—

District	Block	Joint Farming Societies		Collective Farming Societies		Total
		Pilot	Old	Pilot	Old	
Raisen ..	Sanchi	5	..	..	1*	6
Durg ..	Durg	5	1	..	..	6
Khargone ..	Maheswar ..	5	..	..	..	5
	TOTAL ..	15	1	..	1	17

*Located in Obedulla Ganj Block.

9.2. Of these 15 pilot societies, 9 had been functioning for one year, 6 had been in existence either for one or two agricultural years. One old society (Dhamangaon) had been in existence for seven years and the other old society (Suratgarh) for four years.

9.3. For purposes of analysis, the societies studied could be classified broadly into five types. These are:

I. Societies having heterogeneous membership promoted under the influence of big land holders, in order to reclaim privately owned waste lands (3 societies—Bansikheri, Kanodia, Amaravati in Sanchi project of Raisen district).

II. Societies having heterogeneous membership formed on the advice of the officials in order to secure financial assistance and in which individual cultivation was practised. (7 societies of Maheshwar project in Khargone district *viz.*, Chandarkheri, Sukarma, Pahari, Dhol, Talvi and Indrapur and Lakhera of Sanchi project, District Raisen).

III. Societies organised by Ex-Malguzars who dominated the society. Members were closely associated with them in various capacities such as land-lord labour etc. (5 societies—Suratgarh, Kondagaon, Sharda, Dhola, Nilam—Durg district).

IV. Societies formed predominantly by members belonging to medium and small families of near equal status (1 Dhenki of Durg project, Durg district).

V. Societies formed on Government waste lands, ownership of lands vesting with the society (1 Dhamangaon in Obedullagunj Block of Raisen district).

9.4. The features of different types of societies and their performance are discussed in the following paragraphs:

9.5. *Motivations and nature of membership*—The first society in the project set the pattern for others, and generally societies of one type were organised in the pilot project. To illustrate, the Suratgarh society set the pattern for 5 societies of type III. Similarly, the societies in Maheshwar project belonged to type II.

(i) Of the three societies in type I (Sanchi Block), Bansikheri was organised for development of the waste lands that had remained unreclaimed since 1951: out of 231 acres, only an area of 30 acres was reclaimed in 10 years by 5 individual land-owners. The Bhopal Tractor Organisation, which was approached for tractorisation of the lands, advised them to form a cooperative farming society. Before the formation of the society, the land of 231 acres belonged to five families; the promoter (Chairman) sold 149 acres of his land to 12 members in equal proportions at Rs. 1,000 to Rs. 1,500 each payable in 4 to 5 instalments. Thus, all the 17 members became owners of land; the buyers included 3 persons who were working as contract labourers with the promoter. Except two, all the members were largely inter-related. They formed an extended family over two generations and were related to the Chairman as cousins, nephews, in-laws or uncles. The membership was thus homogeneous and a common desire to develop the land had been created under the enlightened leadership of the Chairman. Excepting 4 members, the rest were traditional cultivators. They also owned and cultivated in the neighbouring village other lands which were not pooled. Before formation of the society. the members of Kanodia society (type I) held 384 acres of waste land, of which, only 35 acres had been cultivated by individual land-owners. To the promoters of this society also, Bhopal Tractor Organisation gave similar advice. Of the 22 members, 6 are related as cousins of the first and second order to the Chairman, Manager and Dairy Manager. Unlike members of Bansikheri society who were traditional and progressive cultivators, the members of Kanodia society were absentees; four lived in Bhopal and rest lived in the district place. The members also had income from other sources like business, service etc.

The third society in type I, Amaravati, was organised at the instance of the Panchayati Raj Inspector. At the village level, the land was given by the ex-jamadar of the Tehsildar's office who owned over 50 acres. The rest of the 14 members were small cultivators. Before the formation of the society, only 1/3rd of the land was cultivated and the rest was jungle land.

(ii) Of the 7 societies in type II, 5 societies were located in Maheshwar project of Khargone district. The political situation of Khargone district, had a vital bearing on the manner of organisation and method of functioning of the societies. The political atmosphere was extremely unfavourable to cooperative farming, as in the entire district not one member from the political party accepting the programme was elected to the State Legislative Assembly. On the other hand, nominees of the party which opposed the programme got elected in large numbers. The Government officials had, therefore, not only to convince the farmers of the benefits of the programme, but had also to face the adverse propaganda of political parties. Adding to these, was the anxiety to complete the targets before the financial year. In this situation, the Special Officer and Auditor, whose personal influence counted more than their official position, organised 5 societies in Maheshwar Block. At the village level, the leadership was provided by the bigger landlord, businessman etc. According to the report at the time of formation of society, the essential characteristics of joint farming were not explained to members who carried on individual cultivation. This was so, when the members of these societies executed an agreement-bond pooling the land for 5 years.

As the motivation in all the 7 societies of this type, for reasons indicated earlier, was to secure benefits of financial assistance, for production, land development and irrigation, the composition of membership and leadership needs alone to be considered. The position in this regard is shown in the following table:

Society	Membership	Big farmers	Medium	Small	Landless
Chandrakheri	34	4	4	25	1
Sukarma	29	1	13	8	7
Pahari	17	3	6	7	1
Dhol	14	5	2	4	3
Talvi	13	..	5	8	..
Indrapur	23	3	1	17	2
Lakhera	15	..	..	15	..
Amravati	15	..	1	13	1
	160	16	32	97	15

It would be observed from the above membership composition that majority of members were composed of small farmers and landless. The leadership, however, varied from society to society. In one case (Chandarkheri) a Sanitary Inspector, in another Ex-Patwari, took the lead. In the 3rd society, the Sarpanch and in the 4th society, a sympathetic bigger land-owner provided the leadership. 5th society in Maheswar project did not have any leader. In regard to the 2 societies of this type located in Sanchi project, the leadership in Indrapur society was provided by a big land-owner and in another society (Lakhera) by the Chairman of the Service cooperative society.

(iii) In analysing the motivations of societies in type III, first consideration needs to be given to the pioneer society Suratgarh in Durg district, as it set the pattern for societies in Durg project. Before considering the motivations, it is pertinent, to understand the role played by the leaders of the society in the development activities of the village. The Panchayat under the leadership of the organisers of the society had the distinction of getting the first prize in the State of Madhya Pradesh for the development work done by them. The Panchayat constructed a dam and secured electricity for the village. In addition, a large number of activities had also been organised by the leaders who commanded the confidence of the village.

The organisers of the society were members of Seva Dal of Congress and were taking part in the National Annual Conference of the Congress Party. The Nagpur Congress Resolution gave them the inspiration. Shri Dhebar who visited the village subsequently, also encouraged them to do so. The initiative for organising the society came from the ex-malguzars who were rich and influential and owned 465 acres of land. According to the study, the motivations in organising the society are: (i) gain economic strength and advancement (particularly to themselves) by securing larger institutional credit facilities for patronage and employment over a large number of persons of the village: (ii) improvement in their social status in the neighbouring areas by organising the first society in the area; (iii) start agro-industries and provide employment to large number of people; and (iv) obviate the difficulty of labour supply and to avoid the effects of the impending legislation on land ceilings.

The membership of the society consists of 60; of these 25 are landowners and rest landless. While the land owning members were permanent, the landless members varied from year to year. Most of the landless members were governed by the land-labour and employer-employee relationship with the promoters of the society. The 25 land owning members have pooled 845 acres of land for a period of 10 years. The land distribution of members indicates that 9 are big farmers; 4 medium and 12 small farmers. The members have pooled the entire land excepting 3, who have retained 14 acres because of their location or the land being held in 'Joint Khata'. Cattle, implements and grains were also pooled by 20 members. A member can transfer his land to another member, who is prepared to accept the liability of the outgoing member.

The data about the households and the *inter se* relationship reveal that from 20 households, 36 members had been admitted. From the household of the Chairman, his 6 sons (including 2 minors) were enrolled as members. In three households, two sons each and in five households, one son each and in the rest one member of the family were admitted. The number of members enrolled from family of the President can be seen from the following:

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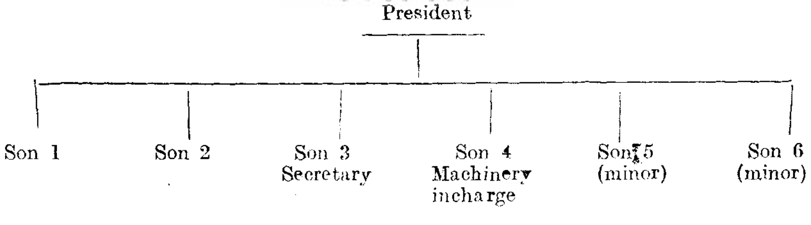

The other four societies in type III were organized by big malguzars with membership more or less similar to Suratgarh society. While in two cases (Kondagaon and Sharda) protection against ceilings on land holdings was mixed with other motives like shortage of labour and agro-industries, in two other societies, development of lands and agro-industries were the motivations. Working of Suratgarh society including mechanization and work relating to cottage industries had a demonstration effect. In three of these societies, a desire to improve the strained relations amongst the brothers of the malguzari family by joint management of land was also noticed.

In all the 5 societies of type III, what the reports calls as "controlling interest" was that of the malguzari family *i.e.* the President, his sons and relatives. The controlling interest in two societies (Kondagaon and Sharda) had contributed 92 per cent and 90 per cent of the land, in 2 other societies (Nilam and Suratgarh) 69 to 55 per cent and in 1 society (Dhaba) 46 per cent of the land. The capital contribution varied from 92 to 97 per cent in 3 societies and 46 per cent in 1 society.

(iv) The society in type IV (Dhenki) was organised due to the initiative of the officials and the office-bearers of the society. The main motivation was to develop lands by joint cultivation. There was also a desire to prevent the shifting of the labour for employment from the village to Bhilai factory. The Suratgarh society which some of the members visited, also created an impact. The secretary of the Suratgarh society was related to the office-bearers of this society. Of the total membership of 18, 4 were landless, 5 small, 6 medium and 3 big farmers. There was no predominance of a single family in this society. However, 4 members were cousins of the first order and 2 were sons of one of them.

(v) The society in type V (Dhamangaon) was organised on the advice of the officials of the Tribal Welfare Department to which a Government land of 545 acres (of which 358 acres was reclaimed by Bhopal Tractor Organisation) was allotted. The membership in the beginning consisted of 20 keers and 14 gonds. As the keers and gonds could not pull on together, the keers left with their bullocks etc. and in their place 16 gonds were settled. The society subsequently purchased a plot of 117 acres for Rs. 3,000. The entire land of 662 acres is the property of the society. But live-stock, cart and implements are the property of the individual members.

9.6. *Membership and identification with society*—The performance of the societies depends basically on the degree of identity, economic status and homogenity of membership.

9.7. In 1/3 societies (type I) members pooled the entire land; in the second society (Kanodia) 87 per cent of the land had been pooled. In the 3rd society (Bansikheri) 52 per cent of land was pooled. In this case, the members had pooled the entire land owned by them in the village and the lands located in the adjoining village (at a distance of 5 miles from the village) were cultivated individually. In 1/7 societies of type II, entire land had been pooled. In the second society, Lakhera, 89 per cent of the land was pooled. In the remaining 5 societies land pooled varied between 38 and 43 per cent. As mentioned earlier, in all these societies, members practised individual cultivation and pooling of land was notional. Of the 4 societies in type III land pooled was 97 per cent in one society, 95 per cent in the second, 96 per cent in the third and 74 per cent in the fourth and 54 per cent in the 5th society. In society of the 4th type, 86 per cent of the land had been pooled. The reasons for partial pooling were: (a) lands located in adjoining village; (b) lack of faith and fear of losing ownership of land; (c) fertile lands retained and inferior lands pooled to get them developed.

9.8. In 6/17 societies, other resources like bullocks, implements were pooled. Of the 6 societies that pooled other resources, 5 were in type III and 1 in type IV, wherein, bullocks, implements, cattle, grains, etc. were pooled. In the Suratgarh society farm equipment like tractors, bulldozers valued at Rs. 25,000, grains valued at Rs. 17,000 were pooled. In addition, cash deposits of Rs. 1.41 lakhs were made. The resources contributed by these members were treated as share capital and/or deposits. The reasons for not pooling resources in the 11 societies were partial pooling of land, absentees and maintenance of individual cultivation units.

9.9. *Size of the Farms*—For the 3 societies in type I, land pooled varied between 200 acres and 403 acres. In regard to societies of type II, 3 societies had land ranging from 133 acres to 155 acres, 1 society had 244 acres and another society 272 acres. The size in case of these societies was not material, as the lands were individually cultivated. One society (Suratgarh) had 845 acres, while 2 societies had lands ranging between 529 acres and 544 acres. One society had 493 acres, and another 415 acres. The society in type IV had 371 acres. The collective society (Dhamangaon) had 662 acres; the land per member in this society was nearly 20 acres. Compared to the minimum size (50 acres for cotton and rice zones, 25 acres vegetable lands, wheat zone 75 acres and Govt. waste lands 110 acres) prescribed by the State Government, the size of the farms was viable. Consequently, the land-man ratio was fairly high in these societies.

9.10. *Agricultural Production*—Whilst considering the performance of the societies, in regard to agricultural production, the study has classified the societies into two categories: (a) societies doing joint cultivation and joint management, (b) societies practising individual cultivation. In respect of societies in category (b) data regarding agricultural production, employment, etc. were not collected. The data, therefore, relate to 9 societies that took joint cultivation.

9.11. *Improved Practices*—Of the 2 societies in type II, Bansikheri society adopted a number of improved agricultural practices. It used improved seeds over 2/3rds of the area under wheat, 1/3rd under gram. New crops like sugarcane, 'Ponda Ganna' and Dhania were also introduced. The operations in respect of ploughing and harvesting were mechanized, fertilizers were used on a limited scale in the first year and argosan used for disinfecting wheat seeds. It also modernized its farm equipment with a tractor, 2 oil engines and pump sets, mechanical crushers etc. For this equipment investment amounting to Rs. 43,000 was made by the society. The 2nd society (Kanodia) mechanized its farm operations in sowing, threshing and harvesting. The society also purchased farm equipment—two tractors, 17 bullocks and 1 pumping set and chaff cutter. It also used improved variety of wheat seed (0.591) after treating the seeds with argosan. One compost pit was also dug. The 25 bags of ammonium sulphate thrust on the society by the block had remained unused as the lands were dry. While the entire paddy area was fertilized in the society as against 1/2 the area amongst non-members, the rate of application of fertilizers per acre in the society was also double of that in non-members holding—the respective figures being 0.33 and 0.16 bag per acre.

Of the societies in type III, Suratgarh had over a period of 4 years adopted widely and intensively improved agricultural practices. The entire area of 525 acres under paddy was sown with improved seeds and treated with fertilizers. New crops like sugarcane, vegetables, turmeric, chillies and dhania were introduced. Green manure was applied on 30 acres and insecticides were used for 100 acres. The total cropped area was increased by 111 acres by double cropping. Mechanisation of farm operations was undertaken on an extensive scale. The three operations, ploughing, threshing and transporting had been mechanized. Chaff cutting and lifting of water was taken up under power operated engines. The gur manufacture was also mechanized.

2nd society, Kondagaon (type III) mechanized the ploughing and threshing operations by means of tractor and threshing equipment purchased after the formation of the society. However, Japanese method of paddy cultivation on 78 acres (out of the total paddy area of 350 acres), improved seeds on 30 acres, application of fertilizers on 125 acres, compost manure on 200 acres, use of insecticides, and san raised on a plot of 1 acre which were the practices adopted by the landowners before the formation of the society were continued.

In the 3rd society, Dhola (type III), the dose of fertilizers in the cooperative farm was not modified. However, fertilizers were used over an area of 303 acres, manure and compost on 80 acres, improved seeds on 16 acres. No changes in cropping patterns or crop rotations were made.

4th society, Sharda (type III), introduced a number of improved practices. Improved seeds of paddy were sown over 260 acres, fertilizers applied over 209 acres, green manure 3 acres, and vegetables on 1 acre. 3/4ths paddy area of the society was fertilized as compared to 18 per cent for non-members. The rate of application was at 0.70 bag in the society as against 0.25 bag among non-members. As in Suratgarh and Kondagaon societies, the ploughing and threshing operations were mechanized. The farm equipment was added with tractors, bullocks etc. valued at Rs. 25,000.

In the 5th society, Nilam (type III), Japanese method of paddy cultivation was carried out in 3 acres. Fertilizers were applied over 280 acres, compost manure over 20 acres and insecticides sprayed over 50 acres. While in the society, the entire area had been treated with fertilizers, only 61 per cent of non-members' paddy area was so treated.

Dhenki society (type IV) had not made changes in agricultural techniques and their practices did not differ materially from those of non-members. However, 16 acres of land was used under Japanese method of paddy, and fertilizers over 150 acres.

Dhamangaon collective farming society (type V) adopted traditional methods of cultivation. Fertilizers were used on one acre in the year 1960-61.

9.12. (ii) *Irrigation*—In the Bansikheri society, 47 acres were brought under irrigation, against the absence of such facilities before the formation of the society. A lift irrigation scheme for Rs. 25,000 had been taken and the pumphouse with 20 H.P. engine had been installed. In the Kanodia society, one well had been dug at a cost of Rs. 2,100 and a pumpset was installed at a cost of Rs. 3,200.

Societies in type II, though doing individual cultivation, had helped their members by giving loans for irrigation and land development. In Chandarkheri society, 7 members had sunk 7 wells and 1 member had purchased a pumpset and irrigated an area of 25 acres. In the 2nd society, 6 members had completed 6 wells and brought an additional area of 52 acres under irrigation. In the 3rd society (Sukarma) 3 wells had been completed. In the 4th society (Pahari) the chairman constructed a well and installed a pump, irrigating about 10 acres of land. In the 6th society (Lakhera) a well was dug and pumpset fixed by one of the members. The 7th society (Indrapur) took up a lift irrigation scheme on the Nala and an overhead tank and channels had been laid.

Suratgarh society brought under irrigation an additional area of 68 acres. (Before the society, an area of 226 was irrigated) 3 new wells and 5 pumpsets were also installed. In the Dhola society, an area of 3 acres was brought under irrigation, a well was repaired and 2 pumpsets were installed. The Sharda society, brought 3 acres under irrigation and sunk a well. In the remaining 2 societies, there was no change in the irrigated area after the formation of the society. However, members in one society (Kondagaon) had 300 acres and another (Nilam) had 100 acres under irrigation before the formation of the society.

9.13. (iii) *Land Development*—The case studies indicate that in 2/3 societies (type I) land development activities had been taken on a substantial scale. The first society (Bansikheri) reclaimed 180 acres and brought the land under cultivation. Compared to the area of 30 acres reclaimed individually over a period of 10 years, the progress made was significant. Of the reclaimed lands, 47 acres were irrigated on which crops like green manuring, sugarcane, dhania were raised. In the 2nd society (Kanodia), before the formation of the society, the members had reclaimed individually an area of 35 acres over a period of 10 years. The society reclaimed 200 acres in one year. Such progress was made possible by mechanisation of the farm equipment. In the 3rd society (Amravati) not much was done, as cultivation was individual. The Chairman, however, had removed roots and bushes on a small area at a cost of Rs. 2,500.

Of the 7 societies in type II, in Sukarma society, nearly 65 acres of land were reclaimed by individual members. Other measures like bunding, levelling and fencing had also been carried out.

In 3/5 societies of type III, land development activities were taken up. Suratgarh society fenced 23 acres and bunded and levelled 3 acres. The removal of field boundaries in some cases had resulted in the enhancement of the cultivated area by about 1 acre. In addition, it also undertook construction of cattleshed and godown. Nilam society reclaimed 4 acres and removed silt from an area of 100 feet. Sharda society also reclaimed 27 acres, fenced an area of 1 acre and constructed a road of 3 furlongs.

The society in type IV (Dhenki) reclaimed an area of 5 acres of waste land and bunded 35 acres. The society in type V (Dhamangaon) bunded an area of 35 acres with the assistance of the Tribal Welfare Department. A barrage consisting Rs. 7,500 was also constructed. The loan of Rs. 10,000 given to the society by Government for lift irrigation scheme was returned as the barrage was under repairs and as the society lacked the initiative and guidance from the Government departments.

9.14. (iv) *Production*—Amongst the societies of type I, in Bansikheri, in the first year, 5 crops were grown, including sugarcane. The total value of production for 1962-63 (1st year) was Rs. 14,362 and the production in the 2nd year 1963-64 was estimated at Rs. 33,000. Although the yields on the society's farm are not strictly comparable with those of the neighbouring village, as the lands are newly broken, the yields were rated as 'quite good'.

In Kanodia, gross produce for 1962-63 was Rs. 19,800. The yield of rabi crop was said to be lower due to warmth in the newly reclaimed soil, when compared to the yields in the neighbourhood. The yields for 1963-64 were expected to compare favourably with the adjoining area.

For the 7 societies in type II and 1 society in type I, data relating to production are not available as the lands were cultivated individually and members were given loans for production and land development. In these societies, apart from Government aid, of Rs. 11,600, the flow of short and medium term loans from the central cooperative banks facilitated larger doses of inputs. According to the report, 'the rate of repayment of loans is almost 100 per cent since members always have the fear that their pooled lands may be taken by the Govt., if the loans are not repaid in time'. Another notable advantage is the supervision provided by office bearers in the proper utilisation of loans advanced to them. All loans are distributed among the members, in some cases, the influential members retained a larger amount than others, in others, the distribution was more or less equitable and just. According to the report, the formation of these societies helped the members in increasing areas under irrigation, and assisted by supplying improved seeds, fertilizers and by individual loans in cash and kind, consequent to which, some members had introduced new crops like sugarcane and chillies. Productive capacity of the beneficiary members in such societies had been stepped up or potential created. According to the study in 4/8 of societies of this type, joint cultivation was possible, if steps were taken to educate the farmers and technical guidance were ensured.

In Suratgarh society (type III) the value of gross agricultural production rose from 1.11 lakhs in 1960-61 to Rs. 1.35 lakhs in 1962-63. Production of individual crops indicated that paddy production went up from 3,600 to 3,924 quintals. Likewise, the wheat production went up from 61 to 71 quintals, in spite of the decline in its area from 50 to 30 acres. Comparative yield rates per acre for paddy indicate a rise in 1962-63 from 6.80 quintals in the first two years to 7.48 quintals. Comparing the yield rates with the village, and non-members, the study shows that, the yield of paddy on the cooperative farm was 20.2 Mds. (7.48 quintals), when compared to the reported average of the village yield of 20 mds. The average yield in 10 non-members holdings was found to be 19.8 mds. Again the yield on the fields retained for self cultivation by members (5 members with 19 acres of paddy) was 17.6 mds. The proportion of paddy area irrigated is identical (33 per cent) in both non-members' holdings and society.

In the Kondagaon society (type III), the gross value of agricultural produce for 1962-63 was Rs. 92,086 (excluding value of by-products). As indicated earlier, there was no change in the techniques and cultivation practices. Compared to the average yield per acre of paddy and tibra (which are the principal crops of the village and society) for the village which was 23 mds. and 4 mds., the yields on the society's farm which were 21 mds. of paddy and 2 mds. of tibra per acre, were lower.

Sharda society (type III) had for the year 1962-63, gross agricultural production valued at Rs. 53,829. The yield of 17 mds. per acre of paddy on the society's farm for 1962-63 was equal to the village average. It is however, lower when compared with the yield of 19.8 mds. per acre reported by 10 non-members of the village. There was no difference in the area irrigated, since the entire area under paddy is irrigated both in the society and among non-members.

Dhola society (type III) had a gross value of production of Rs. 20,000 for the year 1962-63. The yield of crops in the society's farm and the entire village were affected by failure of monsoons. No area could be irrigated due to paucity of water in the local tank.

Nilam society (type III) obtained gross production valued at Rs. 62,730 (excluding byproduct of Rs. 8,000) for the year 1962-63. The yield per acre of paddy on the society's farm worked out to 17.1 mds. compared to the village average which was 18 mds. per acre. When compared to the yields of 10 non-members, which was 13.0 mds., the society's production of paddy was high. According to study, the yield of paddy is not at least lower than the surrounding fields of the village.

In Dhenki society (type IV) the yield per acre of paddy, which was 13.95 mds. was lower when compared to per acre yields of 16.4 mds. of non-members and 17.8 mds. on areas of members retaining lands for self-cultivation.

In the collective farming society of type V, where lands were allotted to 5 groups, for Rabi cultivation (Kharif was done individually); accurate data show a fall in the production due to unfavourable climatic conditions and dissatisfaction among members. The menace of the wild animals and stray cattle was another factor.

9.15. *Agro-industries*—Industries allied to agriculture and cottage and village industries were taken up by 11/17 societies. In this context, special attention to this aspect was paid by the societies of Durg project. Cattle breeding and dairying were taken up by 5 societies, poultry by 6 societies, and pisciculture by 2 societies as per details given below:

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Society	Cattle breeding and dairying		Poultry	Pisciculture	
	Size	Production (value)	Size	Size	Production
1. Suratgarh	16 Hariyana cows 2 Hariyana bulls 6 buffaloes	Rs. 7,092 (Rs. 4,728 milk distributed to members)	200 birds	..	..
2. Nilam	4 cows 3 calves	Rs. 353 distributed to members.	200 birds	8 tanks leased for 5 years for Rs. 4,600	Fish catch for 9 months Rs. 1,700
3. Kondagaon	12 buffaloes 5 cows	Rs. 2,000 milk sale to members	100 birds	..	..
4. Sharda	7 cows	Rs. 150 milk products (Rest milk for calves)	100 birds	..	..
5. Dhenki	.. ..	..	100 birds	Tank taken on lease for Rs. 200	Fish catch sales Rs. 1,500
6. Kanodia	28 buffaloes	80 litres per month	40 hens 4 cocks	..	..

8 societies undertook cottage and village industries activities. All the 5 societies in Durg project took up hand-pounding of paddy, oil ghanee and 2 societies undertook brick making, and poultry. The activities undertaken are given in the following table:

Society	Handpounding of paddy		Oil ghanees (Size)	Brick making and pottery (Value)
	Size	Production (Value)		
1. Suratgarh	17 chakkies	Rs. 1·42 lakhs	3 oil Rs. 3,156 cake Rs. 505 Net profit Rs. 830	Rs. 7,294 Net profit Rs. 374 (Materials used in the construction of buildings of society)
2. Nilam	10 chakkies	Rs. 3,676	..	N.A. 2 trained persons employed.
3. Kondagaon	6 chakkies	430 quintals	2	..
4. Sharda	6 chakkies	390 quintals valued at Rs. 18,562	4	..
5. Dhenki	6 chakkies	N.A. 1,100 Mds. 4	2	..
6. Dhola	6 chakkies	No production (Funds diverted to other requirements)	2	..
7. Bansikhera	..	..	..	Brick making.

Apart from the activities indicated above, 5 societies in Durg started consumer stores for supply of essential commodities to the members and others. The Suratgarh society had an annual sale of Rs. 33,000 and earned a gross profit of Rs. 3,087. In addition, this society had also opened a gramodyog sales depot and its annual sale was of the order of Rs. 1.16 lakhs; in this a net profit of Rs. 465 was earned. The society supplied the hand-pounded rice to jails at Raipur and Bilaspur. This society also started manufacture of hand made paper out of the rotten paddy straw. An investment of Rs. 60,000 has been made. It deputed 4 persons for training at Poona centre and this industry is expected to provide employment for 18 persons for a period of 8 months. Similarly, this and other societies that undertook hand-pounding got their members trained in hand-pounding at various training centres. The various agro-industries generated employment to members and non-members.

Apart from the societies that were doing joint cultivation, societies practising individual cultivation in type II also provided assistance to their members for undertaking cottage and village industries. In Lakhera society (type II), the Chairman started goat-rearing with a loan of Rs. 1,600 from the society. The complement of 35 goats had multiplied in large numbers. In Sukarma society, tanning pits were constructed for the benefit of tanner members. In addition, it had also started brick manufacture on commission basis. In Indrapur society also tanning pits were constructed for members, but they were not working properly for want of working capital.

9.16. *Farm Management*—In 2/3 societies of Type I and 1 society of type III, the lands were located in compact blocks. Data available for 2/5 societies in type III reveal that in one society Suratgarh, the 500 fragments formed into 90 fragments after the formation of the society. In the Kondagaon society (type III), 330 fragments got converted into 60 fragments. In the Dhenki society (type IV), the 230 fragments formed into 78 fragments. The question of consolidation did not arise in 8 societies (which practised individual cultivation) as the pooling of land was notional.

9.17. In 8/17 societies the lands were cultivated individually by members The factors that led to individual cultivation were: (i) tacit approval by the officials to individual cultivation at the time of organisation for achieving the targets, (ii) lack of education about the implications of joint farming, and greater emphasis being placed on the availability of credit and other facilities, (iii) members retaining substantial proportion of lands for self cultivation.

9.18. The methods of farm management may now be considered in 9 societies.

In Bansikheri society (type I) the entire farm was managed as one unit, except in regard to grass lands and sugarcane farm for which a different method was adopted. The Chairman, Manager or some elder member (staying on the farm) allots the work. No rigid systems of supervision and assessment of performance were prescribed. An area of 50 acres under grass was given on crop share basis to certain parties on condition that 50 per cent of the grass collected was given to the society. Likewise, a few acres of newly reclaimed land under sugarcane cultivation had also been given on crop share to one of the members. This was considered beneficial, as the cultivation of sugarcane is both capital and lobour intensive. The member could, however, utilise the pump for watering the fields on meeting the charges of the fuel. For purposes of night watching of crops, the farm was, however, divided into 4 groups, each group being entrusted to labourers on a contract of 8 mds. of wheat a year.

In Kanodia (type I), the entire land is managed as one farm and is operated by two tractor drivers and seven contract labourers (one of them is a landless member). Casual labourers are also employed as and when required. Night watch is also done by contract labour employed at the rate of 4 mds. of wheat-gram for the Rabi season. The Chairman and the two tractor drivers supervise the farm work. The Chairman gets Rs. 3.50 per day, whenever he works on the farm either in a supervisory capacity or in the fields. As the Chairman occasionally visits the farm, the two tractor drivers supervise the work.

As indicated earlier, the societies in type III emulated the practices and procedures of the old society Suratgarh which managed it as a single unit as far as pooling of produce and distribution of income are concerned. For cultivation purposes, the farm which consisted of 845 acres was divided into two sectors. In each sector, one supervisor was in overall in charge, responsible for the implementation of production plans, distribution of work among the sub-supervisors, allotment of labour, supervision of field work and maintenance of accounts for wage payment to members and labourers. Each sector is further sub-divided into two blocks and there is one sub-supervisor for each block. His duties were to get the assigned work done from the labourers as per the instructions of the supervisor and to supervise their work. Amongst the members and the labourers of each block, the work distribution is done operation-wise. The secretary of the society assigns the work to the supervisors. The supervisors are land owners and also members of the managing committee. Systems for supervision of work, and incentives for good work had not been introduced; but the society was planning to do so.

In the three societies—Kondagaon, Nilam and Sharda (type III)—though the lands were cultivated as one unit, for purposes of cultivation, the farm was divided into two blocks. Each block was entrusted to a group of members or labourers. The lands were cultivated by the landless labourers as share croppers getting 1/4th of the produce. Each group was headed by a daroga employed on annual basis. The sub-darogas who were employed to assist the darogas worked on the farm with the share croppers. In the Sharda society, instead of darogas, supervisors were appointed. The President, Secretary assigned the work to the darogas and supervisors. In Dhola society (type III), the farm is operated as a single unit. The Secretary and the Manager decide the work to be done and assign them to the three supervisors. The three supervisors get the work done through labourers and the members attached to them.

In Dhenki society (type IV) the farm is operated as a single unit and is not divided into blocks. The work for the next day is allotted on the previous day by the Secretary and Manager who assign work to the three supervisors. The three supervisors get the work done through the labourers and the members attached to them. As there is shortage of labour due to the proximity of Bhilai and cement quarry who employ casual labourers on a large scale, the manager and the three supervisors (darogas) supervise the work of the labourers. The 5 members who are working in the supervisory capacity get wages in cash and kind after the harvest.

In the Dhamangaon society (type IV), until 1962-63, that is for a period of 4 years, the land was cultivated by 5 groups of 6 members each, including its leader, for the Rabi crop. Kharif crops were, however, raised individually. They did jointly all operations right from ploughing to harvesting and thrashing. The male members from every family worked on the farm. The family members helped them at peak seasons. The bullocks and implements allotted to and kept by individual members were used for cultivation. Seed was distributed by the society to the groups. From the total produce of each crop, the seed loan taken from the society was returned at 125 times and grains sufficient to pay land revenue for the lands cultivated by groups was given to the society.

9 19. *Employment and Remuneration for Work*—Participation of members in farm operations and remuneration received are indicative of the benefits accruing to them in the formation of the societies. The ature and type of employment performed by members in each society, owever, depended on the composition of its membership. In one ociety of type I, all the 87 members participated in the farm operaions. 4 of the members stayed on the farm and one was looking to the anagerial and administrative aspects of the farm and another to gro-industries. Whenever there was pressure of work, the rest of the 1 members participated in farm operations, as they had lands for individual cultivation in the traditional village. If they could not work they gave substitute labour. Even the Chairman of the society partici-

pated in the farm operations at least for 10 days in a month. In the Kanodia society (type I), 1 out of 22 members participated in the farm operation; 5 others were doing jobs like supervision, tractor driving, management and agro-industries. The majority of members in these societies were absentee cultivators living in the neighbouring cities. In the society of the 5th type Dhamangaon, all the members participated in the farm operations because they were landless members.

In regard to the societies of the Durg district it may be mentioned that members belonging to the families of the bigger landlords and malguzars undertook jobs of management, administration and agro-industries. In the Nilam society of type III, out of 24 members, 9 were non-working and 15 working members. Of the working members, 7 worked on the farm, 2 did supervision, 2 management and administration and 4 agro-industries. In the Suratgarh society (type III), out of 25 land owning members, 6 did not participate in the farm operations because they were minors and women. Of the working land owning members, 6 participated in farm operations, 5 took jobs of supervision, 6 agro-industries and 2 management and administration. On an average, the landless members (husband and wife) got an annual income of Rs. 500. 32 landless members participated in farm operations. In the Dhola society (type III), out of 16 members, 6 were working and 10 non-working. Out of the 10 non-working members, 4 were physically incapacitated to do farm work, 4 were in service, 1 minor and 1 woman. In regard to the 6 working members, 2 worked on the farm, 3 on supervision and 1 management and administration; and 5 members, however, participated casually in farm operations. In the Sharda society (type III) the position was more or less similar to Dhola society. In this case the non-working members were 16 and working members 5. In the Kondagaon society (type III) the non-working members were 16 and working members were only 12. 3 of the working members were engaged in agro-industries; 3 participating in farm operations casually. In the Dhenki society (type IV) the participation of members was considerably high. While 11 members were working, 7 were non-working. 6 members worked on the farm and 5 on farm supervision.

9.20. Data regarding distribution of wages between members and non-members are not available. In the Suratgarh society for example. the share cropper couple members (landless) were paid Rs. 610 as wages (Rs. 434 for the husband and Rs. 176 for his wife). Nearly 3/4 of the remuneration for work was paid in kind. Usually the supervisor got an annual remuneration ranging between Rs. 450 and Rs. 600. The manager of the consumers depot was paid a salary of Rs. 1,800 and the Secretary Rs. 2,300 per year. Other societies of Durg district adopted the systems followed by the Suratgarh society.

The landless members secured in all the societies employment througnout the year.

9.21. *Distribution of Produce and Profits*—In regard to the distribution of produce, Bansikheri society (type I) had decided to allot 1/3rd of the net income as return for land pooled by the members. The land return, however, was not paid in cash to members but credited to their accounts. In this case, it was possible to do so as members were receiving regular remuneration for work and most of them had separate incomes from individual farming. Kanodia society (type I) did not pay any land return to the members in the first year and the amount was utilised for repayment of loans. As most of the members were absentees having incomes from other occupations, this arrangement was adopted.

In the Suratgarh society (type III) for the year 1962-63, 1/3rd of the gross produce was paid as return for land pooled by members. A sum of Rs. 45,240 was paid which works out to an average of Rs. 55 per acre. According to the report, the return for land paid by the society compared favourably with the local rent. At the end of June 1963, the society had created a reserve fund of Rs. 2,113 and depreciation fund of Rs. 12,000. As an incentive, a dividend of 3 per cent was also declared on share capital. Interest at 2 per cent on kind deposits and 5 per cent on cash deposits was also paid to members and the total interest paid aggregated to Rs. 8,000. The society also adopted the practice of giving free fodder to members on the condition that they should give manure in return to the society. Vegetables and milk were supplied to members at 50 per cent and 33 per cent concessional rates. In terms of money, these concessions can be estimated to cost about Rs. 2,000 to the society. On special occasions like death etc., some financial assistance was also given to the members. Nilam society (type III) paid 1/3rd of the gross produce as return for land to land owning members; 1/4th of the gross produce was given to share croppers. The land return paid amounted to Rs. 20,839 which works out to Rs. 54 per acre for paddy land and Rs. 16 for non-paddy lands. The average rate was Rs. 47 per acre which also compared favourably with the local rents. This society also supplied vegetables at 25 per cent and milk at 33 per cent to its members. Members were also supplied fodder free of cost in return for manure. In Kondagaon society (type III) the rate of land return for 1962-63 was Rs. 78 for dhana land, Rs. 26 for bharri land; the average worked out to Rs. 69 per acre. For individual members, it varied between Rs. 40 to Rs. 99 per acre. The rates of land return were a little lower, when compared to the local rents. This society also supplied vegetables worth Rs. 2 per fortnight free to its members. A little quantity of tincture banzaine milk and fodder were supplied to the members. The members, however, supplied manure to the society. In the Sharda society (type III) land return of Rs. 18,626 was paid for the year 1962-63, which worked out to Rs. 40 per acre. The rates were less when compared to the local rents of the region. The land return was, however, paid in the form of paddy. Similarly, wages to members were also paid in kind. This society also supplied vegetables worth Rs. 700 at subsidised rates and fodder free of cost in return for manure to members. Dhola society (type III) could not pay return for land due to crop failure. The society, however, returned the grain deposits made by the members at the time of organisation of the society.

Dhenki society (type IV) gave 580 mds. of paddy (value Rs. 600) as advance for land return. The procedure for valuation of lands had not been decided. This society also supplied free fodder to members maintaining the cattle. In addition loans to the extent of Rs. 3,100 were given to four members.

9.22. Of the 9 societies that undertook joint cultivation, data available for 7 societies indicates that 4 societies had suffered losses while 3 societies had earned profits. The Kanodia society (Type I) had earned a profit of Rs. 13,000, while the Bansikheri society of the same type had incurred a loss of Rs. 267. Suratgarh society (type III) had earned profit of Rs. 570 in 1961-62 and had incurred a loss in the second year *i.e.* 1962-63 of Rs. 647. Kondagaon society (type III) had earned a profit of Rs. 13,450 in the year 1962-63. If the loss of Rs. 12,581 incurred in the previous year is deducted, only a net profit of Rs. 888 was available to members.

9.23. *Attitude of Members*—The success of cooperative farming society depends not only on its economic results but also on the manner in which the human aspects of management are tackled. In this context, the attitudes of members towards the society and its management are vital. In some of the societies, the decisions taken by the chairman without consulting the members were resented to. In one case, the appointment of a relative of the chairman, as office bearer, without consulting the members, created a misunderstanding. In a few societies, the small farmers were discriminated and bigger land holders availed of larger benefits. In the Durg project, the decision making power exercised by the dominant family, often led to dissatisfaction amongst small farmers and landless even when these members had secured greater employment and higher incomes. Accounts were not maintained properly and the members were not apprised of the financial results This created fears and suspicions among members. It is essential, therefore, that leadership and office bearers of societies should understand and accept the basic values of an open and democratic society and work for their active implementation and articulation in the cooperative societies. As otherwise, their influence instead of proving helpful may warp cooperative societies from their real objectives and purposes.

9.24 *Financial Assistance*—The 15 societies registered after the introduction of the pilot project scheme, received full financial assistance from the cooperation plan. The old societies, Suratgarh and Dhamangaon, did not receive any assistance under the cooperation plan. Suratgarh society, however, secured from Government a share capital loan of Rs. 2,700.

5/17 societies received financial assistance from other Departments. The Bansikheri society received Rs. 25,000 for the lift irrigation scheme while Kanodia (both type I) received Rs. 44,000 under rural housing. Similarly, Indrapur society (type II) received Rs. 25,000 for lift irrigation scheme. 3 societies received assistance from the block for the poultry units. Financial assistance was also received by 6 societies from the Khadi and Village Industries Commission for agro-industries, the industry, generally undertaken was hand-pounding of paddy. The Suratgarh society received financial assistance from the Khadi Commission of the order of Rs. 2.00 lakhs (of which Rs. 50,000 was grant).

9.25. Short and medium term loans from cooperative banks were provided to most of the societies. The medium term loans were issued for purchase of pumping sets, bullocks, etc. Societies doing individual cultivation also received finance from the central cooperative banks. The Kanodia society received as much as Rs. 54,000 from the central bank as medium term loan. The Kondagaon society also received Rs. 42,000. Only one society secured a loan of Rs. 1,500 from the central cooperative bank.

9.26. In regard to short term loans for production, compared to the area of the farm, the quantum of assistance provided to societies in Durg project was small. Suratgarh society, which had an area of 840 acres, received in one year a short term loan of Rs. 11,000. The volume of finance received by other societies in Durg project is shown below:

Society	Area pooled (acres)	Short term loan provided by co-operative banks
Kondagaon	529	R 38,350
Sharda	554	Rs. 18,000
Dhola	415	Rs. 9,000
Nilam	493	Rs. 13,425
Dhenki	371	Rs. 13,780
	2,362	Rs. 92,555

It would be observed from the above table that on an average the short term loan provided to societies in Durg project worked out to Rs. 39 per acre, which cannot be considered to be adequate, when compared to the size of the farm, area under irrigation, cropping patterns etc. One society, Kondagaon, borrowed Rs. 15,000 from a private money-lender at 24 per cent interest and another society (Dhola) borrowed Rs. 5,000 from private cultivators. Some of the societies, therefore, diverted the assistance provided by the Khadi and Village Industries Board for other purposes.

9.27. *Technical Guidance*—Technical guidance was not generally available to the societies in an adequate measure. Whilst assistance was provided to the societies for the preparation of the production plans, the guidance and resources required for their implementation were not available. The extension staff attached to the block had not imparted the technical knowledge in improved agricultural practices. In majority of the societies, the accounts and registers were not properly maintained. The officials of the Cooperation Department did not keep in constant touch with the working of the societies and extend assistance to them in resolving their day-to-day problems.

CHAPTER X

NOTE ON THE PRESENT POSITION OF SOME SOCIETIES STUDIED BY THE WORKING GROUP ON COOPERATIVE FARMING

Apart from the societies case studied, an attempt was also made to collect data about the position of the 29 cooperative farming societies studied by the Working Group (Nijalingappa Committee) in 1960 (mentioned in Annexure VIII of volume II of the report) for understanding the factors that stabilise the working of societies and causes that create disintegration. The data has, however, been received only for 5 states relating to 19 societies.

10.2. These 19 societies can be divided into two categories,

(i) societies that continued joint cultivation—11,

(ii) societies that cultivated lands individually or disintegrated —8.

10.3. *Societies doing Joint Cultivation*—The frequency of societies under this category and the period for which joint cultivation is practised is given below:

17 years	1 society	10 years	4 societies
15 years	1 society	9 years	2 societies
12 years	1 society	6 years	2 societies

10.4. Of these, four societies were in Maharashtra, three in Punjab, two each in Gujarat and U.P.

The two societies in Gujarat that come under this category had made further progress in land development and agricultural production.

Cooperative Collective Farming Society (A-III) of Gujarat was in 'A' Class for 6 years. Between the years 1958-59 and 1963-64, the reserve fund of the society increased from Rs. 59,805 to Rs. 71,376 and other funds from Rs. 52,000 to Rs. 57,000. The society made an investment of Rs. 38,000 in the National Savings Certificates. It is paying dividend to share-holders at 4 per cent continuously for the last 6 years.

Joint farming society (A-I) of Gujarat is working for nearly 15 years. It set a good record in regard to irrigation, production and registered further increase in providing employment to its members. Land dividend was paid to members at 6 per cent every year in addition to dividend on share capital. 4 land owning members left the society after completion of the minimum period of 10 years. These members were substituted by nominal members.

Collective Farming Society (6-IV) of Uttar Pradesh continued to function for 12 years. This society is also included in the present survey. According to the survey, the society is undoubtedly one of the best societies in India. It reclaimed an area of about 387 acres, of which, 125 acres was irrigated by canals, 5 acres by tubewells and 5 acres by masonry well. It has also built up its owned capital of Rs. 1.30 lakhs. The average profit of the society varied from Rs. 16,000 to Rs. 20,000 a year. The members secured employment for 300 days. Certain welfare measures like construction of houses, school for the children, supply of milk etc. were also undertaken.

Joint Farming Society (G-IV) of Uttar Pradesh organised in 1959 with 31 members and 300 acres of land had at the end of the year 1963, 21 members and 124 acres. Some of the land owning members had withdrawn their lands from the society. Even so, the society continued to function. Out of 124 acres, an area of 77 acres was irrigated. The society was making profits continuously for 4 years and incurred loss for one year. The remuneration of Rs. 40 paid to members had created discontent as incentives for good work were lacking.

Joint Cooperative Farming Society (E-VII) of Punjab continued to work as a joint farm. As a result of the internal friction and dissensions, 14 members withdrew their land in 1962-63. In their place, 8 other land owning and 6 landless were admitted. The average yield of the farm increased from 13 mds. in 1955-56 to 22.5 mds. in 1963-64. The society had also started poultry, gardening and other activities.

Joint Cooperative Farming Society (E-III) of Punjab was working with 11 members and 126 acres for over 9 years. This society is also included in the present survey. Dry land was converted into wet land and a tubewell had been sunk and about 88 acres of land was irrigated. The wheat production on the farm had increased from 16 mds. in 1958-59 to 29 mds. in 1963-64. It had also started poultry, and sericulture in 1963-64. The society had made a profit of Rs. 885 in 1963-64.

Another Punjab joint cooperative farming society (E-I) was working for nearly 9 years. It had 12 members—7 males and 5 females. The area of 300 acres pooled in the society, belonged to one family. The Working Group had described the society as "successful large scale farm run on scientific lines but there is hardly any cooperative element in it". There has been no change in this position.

In two collective farming societies (A-V) of Maharashtra composed of backward classes, although, joint cultivation was continued, there was no improvement in agricultural production and employment. This was due to inadequate financial aid, technical guidance and the poor quality of land. The working of these two societies could be improved, if greater supervision is exercised.

Collective farming society (A-VII) of Maharashtra which worked for 17 years had set a good record in regard to agricultural production. The society had, however, got into difficulties due to Panshet disaster, which, reduced the irrigated area from 220 acres in 1958-59 to 12 acres in 1963-64. The society suffered a loss and the Government loan had become overdue. Due to certain differences among the members, the management had been superseded and the Government had appointed an administrator.

In collective farming society (A-IV) of Maharashtra which had worked for nearly 10 years, the sugarcane cultivation had increased from 65 to 70 B.Mds. to 120 B.Mds. in 1963-64. The society had also increased its reserve fund during a period of 5 years (1958-59 to 1963-64) from Rs. 1,575 to Rs. 6,159 and for the same period depreciation fund had also increased from Rs. 11,000 to Rs. 44,248. As the society incurred losses continuously for a period of three years from 1960-61, due to mismanagement, specially in the dairy activity, the society requested for the appointment of a Government Manager. The Government has since appointed an administrator from 1-7-1964. It is significant to note that for 1963-64, the society had earned a profit of Rs. 30,000 and secured a cash prize of Rs. 275 from the District Cooperative Bank.

10.5. (ii) *Societies that cultivated lands individually or disintegrated*—In regard to 8 societies that come under this category, it may be stated that three societies *viz.*, societies (G-I) and (G-II) of U.P. and society (E-IV) of Punjab were doing individual cultivation even when the study was made by the Nijalingappa Committee. The same position still continued. Only the society (E-IV) had been liquidated and the other two societies were functioning as service cooperatives. The members of these societies, were, however, not in favour of liquidation of the societies. The position of the remaining 5 societies is discussed below:

Joint Cooperative Farming Society (C-III) of Mysore State worked jointly for one year *i.e.* 1959-60. From 1960-61 members had started individual cultivation. According to the evaluation in the current survey, the main reasons for individual cultivation were: (i) big farmers withdrew the land and to others followed; (ii) bad management, theft, negligence of work, bad treatment of bullocks. In joint cooperative farming society (G-III) of Uttar Pradesh, which consisted of small farmers, the lands were cultivated jointly for a period of 4 years. In the 5th year, the lands were individually cultivated. According to the case study of this society made in the present survey, the discontinuation of joint cultivation was mainly due to: (i) inefficient systems of farm management, (ii) the transfer of the school teacher who organised the society and (iii) opposition of vested interests.

Joint Co-operative farming society (E-IV) of Punjab worked successfully for 10 years. As a result of joint cultivation, the average yield per acre increased considerably and additional-employment was provided to members till 1961-62. Due to internal differences among some of the members, the land was cultivated jointly in two groups in the year 1962-63. In the succeeding year, individual cultivation had started. The society was under winding up process.

Joint farming society (G-IV) of U.P. came into existence, to secure the scattered plots into one compact block. It got its lands consolidated in compact blocks. Upto the year 1962-63, the society had continued joint cultivation. In 1962-63, the misappropriation of the sale proceeds of sugarcane by one of the members led to disintegration. The society is, however, under the process of reorganisation.

Joint cooperative farming society (A-II) of Gujarat worked for a period of 10 years. The society consisted of Adivasi tenants who had pooled the land held by them under tenancy. As there was no irrigation and efforts to sink a well having failed, the society was liquidated. The society could not also create opportunities for supplementary income. It may be noted that the society at the time of liquidation had no dues to pay either to the Government or to Cooperative Bank.

10.6. It would be observed from the position indicated above that though some of the societies had been successful in increasing production and income of their members by joint cultivation, they had disintegrated. The important reasons for this were: (i) failure to secure financial aid, services and guidance from Government and other organisations, (ii) disappearance of the leader who formed the backbone of the society and failure to build second line leadership, (iii) lack of incentives for good work and deterrents for inefficient work and improper methods of farm management, (iv) financial aid from the Government and other departments dryed up after the full quota of assistance had been utilised, (v) jealousy of vested interests and propaganda, (vi) internal differences and mutual dissensions.

10.7. On the other hand, the societies that continued joint cultivation over a longer period reveal some of the important factors that go to stabilize their working. These are:

(a) homogeneity among members and common desire to develop agriculture jointly,

(b) benefits from joint cultivation should flow to members continuously in one form or another.

(c) a few households should adhere to the concept even against withdrawal of some members.

सत्यमेव जयते

PART III

ASSESSMENT AND RECOMMENDATIONS

सत्यमेव जयते

CHAPTER XI

OVERALL ASSESSMENT

From the foregoing chapters it will be seen that the progress of cooperative farming has varied widely from state to state and from project to project. The differences in leadership and ability, soil and climate, have also been considerable. It was for this reason that the scheme for pilot projects originally stated that societies should be organised in a selected block in each district and under diverse conditions. From the varied experience gained, suitable techniques of organisation, operation and management were expected to emerge.

11.2. The data thrown up by the survey and the experience of four years in the Third Plan, suggest that, as a result of the pilot projects, certain areas or clusters of potential growth have developed. These include the districts of Dhulia (Maharashtra), Sambalpur (Orissa), Bhavnagar (Gujarat) and Jullundur (Punjab). In these areas, favourable conditions have been created and a leadership exists which is interested in the programme and has a fair understanding of its essential features and problems. Besides these areas, there are certain pilot projects like Meerut (district Meerut), Uttar Pradesh, where, with careful nursing, the programme of cooperative farming is likely to develop encouragingly. In addition, there are isolated societies which have also progressed well. Taking the country as a whole, however, cooperative farming has not yet taken firm roots. Here, it is necessary to emphasize that the programme is still in its infancy. By its very nature, cooperative farming will require time before it can make a significant impact on the entire country. Even so, in the areas mentioned above, study leads to the conclusion that the programme has demonstrated its capacity to step up production and create the potential for future development. In other areas, the programme is yet to develop.

The case-studies indicate that a great deal requires to be done to encourage, guide and sustain the programme. In areas where a cluster of societies have been formed, it will be necessary to steer them to the next stage in their development. Elsewhere, the basic conditions for their formation along the right lines will have to be created.

11.3. *Leadership*—The progress of cooperative farming will depend ultimately on the extent to which it develops as a genuine mass movement having its own leadership. The studies indicate that in Dhulia district, the programme was started by a few workers of one political party, who began organising cooperative farming societies in 1960. They organised the first 4 societies in that year. Thereafter, the workers of other political parties also entered the field when the pilot project scheme was launched. It was, therefore, possible for the officials of the area to secure the cooperation and support of both district and village leaders. A few societies were also formed by persons without party affiliation. In addition, various district level cooperative organisations played a vital role in promoting this programme. Without the support of the Central Cooperative Bank, and the Purchase and Sale Union, it would neither have been possible for the societies to function properly nor to pave the way for the organisation of new societies. In Wardha district, the initiative in organisation was taken by the followers of a religious leader in whom the farmers of the area had considerable confidence. Unlike Dhulia, however, where the district leadership, both political and cooperative, lent support to the programme, in Wardha, such support was missing.

11.4. In Bangalore district, before the organisation of pilot societies, was undertaken, Sarvodaya workers organised three cooperative farming societies, which proved to be failures. As a result, non-official leaders avoided the introduction of joint cultivation even when pilot societies were organised. The programme, therefore, had to depend upon officials of the area, and certain non-officials, who were not fully motivated. In Dharwar district, the leadership and guidance came from Special Officer appointed by the State Government for cooperative farming. He belonged to the area and participated before Independence in the freedom movement. When the programme of pilot projects was started, a few of his colleagues who were local leaders, took an active part in the programme.

11.5. While the Sarvodaya workers of Bangalore were intellectual and ideological in their approach, the workers of Dharwar had a good deal of practical experience in the field, and were well-conversant with local traditions.

11.6. In none of the states of Madras, Andhra Pradesh and Kerala, did cooperative farming have the organised backing of any political party of non-official organisation. In one instance, the dominant political group, drawing its support from the traditional village leadership, made every effort to prevent the organisation of a society of landless workers. Individual members of some political parties, however, took an interest in the formation of certain societies. For instance, in Andhra Pradesh, two opposition MLAs. took a keen interest in the organisation of two societies.

11.7. In Madras and Kerala, the organisation of societies was mainly the result of official initiative. In the former state, the role of officials continued to be felt even in the day to day working of the societies. This, in turn, frequently led to dissatisfaction. The members of the societies finding it convenient to blame the government both for what it did, and for what it failed to do.

11.8. In Uttar Pradesh, there was little support either from the state or district level leaders of the political parties. On the contrary, there was hostile political propaganda against the programme in certain districts. In spite of this, the societies studied were organised because of the initiative of local school teachers, Gandhi Ashram workers or a stray, enthusiastic official. A number of societies also came up because cooperative farming suggested itself to small and medium farmers as a useful technique for overcoming the difficulties implicit in marginal cultivation. A group of bigger land owners and former zamindars, particularly in the Tarai areas, also came forward to organise societies in some cases in an effort to avoid tenancy and ceilings legislation.

11.9. In Punjab, cooperative farming societies were formed mainly by medium cultivators; a few societies consisting of large cultivators, who enrolled landless labourers to satisfy the requirements of registration, also came into existence. Both types of societies were production-oriented, some were formed with a view to overcoming difficulties created by the shortage of labour, resulting from emigration abroad and employment in the armed forces etc. Leadership in Punjab was, by and large, provided by economically resourceful and influential persons.

11.10. Both in West Bengal and in the plains districts of Bihar, leadership was provided by farmers who traditionally depended upon share-cropping in the management of their lands. The societies which they formed generally continued the earlier tenancy arrangements. In the tribal areas of Bihar, where potential exists for the programme, the societies were formed chiefly in order to reclaim waste lands with government assistance.

11.11. In Orissa, the programme in Cuttack was provided leadership chiefly by bigger landowners with a view to solving problems of management. In Sambalpur, on the other hand, a large number of societies are formed by farmers of varying status, in order to utilise more fully the irrigation and other resources available in the district. The Central Cooperative Bank played an important role in promoting and sustaining the societies.

11.12. The initiative for starting cooperative farming societies in Assam was taken by the Anchalaik Panchayats (Panchayat Samities) and the officials of the Cooperative Department.

11.13. In Madhya Pradesh the leadership was generally provided by large landowners and ex-malguzars. In one district, hostile political propaganda had a serious effect on the programme. In Rajasthan, the traditional leaders of certain landless communities provided the initiative in Umerain block (Alwar). In Gujarat, in Savarkundla block (Bhavnagar), leadership was forthcoming chiefly from social and political workers. In both the states, in addition, young and educated farmers who were keen to introduce new ideas, organised joint farming societies.

11.14. The case studies indicate that, at present, the progress of cooperative farming has suffered as certain political parties have made opposition to it a plank in their programme. Though support has been given by individual members of political parties and non-official co-operators believing in the efficacy of cooperative farming this support has not been very effective.

11.15. Broadly, it can be said that non-official leadership was of four types:

(i) that provided by members of political parties, as in Dhulia,

(ii) that provided by social and religious workers, as in Savarkundla, Dharwar, Wardha and Varanasi;

(iii) that provided by other cooperative institutions in the district, as in Dhulia and Sambalpur; and

(iv) that provided by those who can be described as the village intelligentsia *i.e.*, school teachers, pleaders having their roots and influence in the village, educated and progressive farmers etc.

11.16. Where this non-official leadership was closely identified with the members, it was able to inspire and guide them in their cooperative endeavour. Where a gulf existed between the leaders and the members of the societies, though managerial skill and better planning were provided, the leaders could not sustain the societies in their day-to-day working.

11.17. Whilst the formation of societies has been entirely voluntary in character, the programme was officially inspired and guided in most of the areas. Where it succeeded, however, the results were achieved chiefly because non-official leadership took the lead and was enthusiastically supported by the officials.

11.18. *Joint Farming Societies : Membership : Motivation and Identification of the Society*—As will be seen from the foregoing chapters, the societies case-studied have been categorized in a variety of types, taking into consideration the land-owning status of members, their *inter se* relationships etc. To some extent the types have also been conditioned by the variations in the nature of data collected by the different Agro-Economic Research Centres, which have emphasised different aspects of organisation and working in each area.

11.19. Whilst the types formed have been many, for purposes of an overall view it will be convenient, first, to consider the joint farming societies and, thereafter, the collective farming societies.

11.20 The joint farming societies studied may be classified in 4 main types. The distinction between these types should not, however, be considered rigid. Societies in one category may, in certain cases, also have characteristics of another category. Looking broadly at the membership of the joint farming societies case-studied, they may be divided as follows:—

11.21. *Type I*—Societies consisting predominantly of small cultivators. These may be further classified into

(a) societies in which the members were bound by ties of caste and kinship, and

(b) societies in which members belonged to diverse castes and kinship groups.

11.22. In the former sub-type, may be classified 15 of the societies case-studied and, in the latter, may be classified, another 15 of them. In most of these societies, it can be said that economic necessity motivated the farmers to join together. Whilst the quality of leadership varied from project to project, the difficulties of marginal cultivation which the farmers faced, convinced them of the need to form societies. The societies were, therefore, characterised by a high degree of member-participation in work, and, generally, by complete pooling of the land resources of members. In many cases, members also pooled their bullocks, implements etc. There were, however, variations to this, as in Madras and Bihar, where part of the holdings were pooled and members lacked a sense of identification with their societies.

11.23. The case-studies indicate that, as between the two sub-types, in the societies of group (a), the members were able to work more harmoniously, and face their problems with a great degree of mutual understanding. Amongst the societies of group (b), when problems arose, it was more difficult to get members to work in harmony. Thus, at the time of study, 11/15 societies of group (a) were working enthusiastically; amongst the remaining 4/2 had not begun joint cultivation, whilst 2 others had reverted to individually cultivation. Amongst the societies of group (b), 7/15 were working promisingly. 2 had subdivided—the members forming 2 more societies, whilst the remaining 6 were either defunct, disintegrating, or practicing individual cultivation.

11.24. *Type II*—Societies formed predominantly by medium cultivators: Within this type may be included 10 of the societies case-studied. Generally, the members of these societies were drawn from 2—5 family groups; the majority of them were, nevertheless, maintaining separate households and cultivating their holdings individually before the societies were formed. However, in 2 of the societies of this type, members belonged to a single family. In both of these, they cultivated lands that, over 20 years or more ago, formed a single cultivating unit. In the intervening period the members had cultivated their portions individually, but facing difficulties in such cultivation, had joined together once again in order to derive the benefits of joint management and larger scale.

11.25. In the majority of these societies, member-participation in actual farm operations was high. In a few, whilst participating in farm operations, members took a keener interest in supervising the work, as traditionally, they had depended, and continued to depend, upon hired labour for farm work. Of the 10 societies of this type, 7 were functioning encouragingly. In 2 of the remaining 3 societies, disputes had arisen and, in 1, there was no joint cultivation.

11.26. *Type III*—Societies formed predominantly by bigger cultivators: 20 of the societies case-studied belonged to this type. Generally, these societies were dominated by 1-3 families which, in order to satisfy the minimum numerical requirements for registration, also enrolled a few nominal members or landless labourers. In 6 of these societies, at the time of registration, the dominant members had been keen to forestall the possible effects of ceilings and tenancy legislation.

With a few exceptions, in each of the societies of this type, the land-owning members were either non-working or absentees. Where they participated in farm work, it was chiefly in a supervisory manner. In most cases, a large number of hired labourers were engaged for farm operations. In certain cases, the societies served to perpetuate the system of share-cropping in another form; in some, the pooling of land was merely on paper.

11.27. Thus, at the time of study, out of the 20 societies of this type, in 8, the members had pooled the bulk of their land and joint cultivation was being practised. In 3 others, only a small portion of the members' lands were being jointly cultivated. In another 8 societies, pooling was merely on paper, the remaining 1 society was defunct at the time of study.

11.28. *Type IV*—Societies comprising heterogeneous membership; big, medium and small farmers joining together, in certain cases landless persons also being enrolled in order to satisfy the minimum requirements of registration. In all, 27 societies of this type were case-studied. Generally, members were drawn from a number of families and there were marked differences in their economic status. The degree of identification of members with their societies also varied widely from case to case. In some, the number of absentees was large, and, as a result, work on the farm had to be undertaken either through landless members or through hired labourers. In others, where partial pooling had taken place, work on the farm was limited as also the employment potential of the farm. Only in a few societies of this type did the majority of members participate in farm operations. At the time of the study, out of the 27 societies of this type, 16 were practising joint cultivation. The case-studies show that in 2 of them, the landless members grew dissatisfied with their lot and withdrew after a while in one case, they then formed a society of their own. In the remaining 11 societies of this type, members were cultivating individually. The case studies indicate that in 10 of them (7 of which were situated in one state) members did not begin joint cultivation at all. In the remaining 1 society, the members had reverted to individual cultivation after a brief period of joint cultivation.

11.29. To sum up, out of the 87 joint farming societies case studied, 54 were engaged in joint cultivation. In 8 others, though the lands were being jointly managed, pooling was merely on paper. The remaining 25 societies were either disintegrating, defunct, or yet to begin joint cultivation.

11.30. *Agricultural Production*—As indicated earlier, 132 joint farming societies were covered by the survey, of which 87 were case-studied. The performance of these societies is indicated below:—

11.31. *Increased Irrigation*—On the basis of data available a schedule has been prepared which gives an indication of the steps taken by the joint farming societies surveyed to increase irrigation potential (Appendix III). As will be seen from it 85 joint farming societies took measures to improve the irrigation facilities on the lands which had been pooled. A total of 61 new wells were constructed by 43 joint farming societies. 15 of these societies also installed a total of 25 pumping sets. In addition, 81 more pumping sets were installed by another 43 societies. The data available also indicate that a total of 25 wells were repaired by 19 joint farming societies and 6 tube wells constructed by 5 societies. Further, 9 societies had either installed pipe lines, or constructed new channels to irrigate their lands, whilst 4 societies had deepened existing tanks in the area.

11.32. In Dhulia, besides the 6 joint farming societies case-studied, 20 other societies were surveyed. The data available in regard to these 26 societies indicate that in total, 9 societies had dug new wells. 10 societies had deepened 14 old wells, and 2 societies had equipped their farms with pipe lines to carry water from low lying areas to high lying areas, 23 societies purchased 49 oil engines. Only 6 societies were not able to increase irrigation facilities, either because of scarcity in sub-soil water, or because the water available was not suitable for irrigation.

11.33. In Mysore, 2 wells were constructed and 5 diesel engines purchased by 4 out of 7 joint farming societies studied.

11.34. In the states of Madras, Andhra Pradesh and Kerala, 7 out of 9 joint farming societies studied had constructed 3 new wells and 3 more were being completed. 4 electric engines and 5 oil engines were also purchased by these societies. In addition, one society had repaired its water channels.

11.35. In Uttar Pradesh, 9 out of 16 joint farming societies had purchased 8 pumping sets, constructed 3 masonry wells and 1 society had installed cement pipes for the better utilisation of water.

11.36. In Punjab, 7 out of 13 joint farming societies studied had purchased 14 pumping sets, constructed 1 new tubewell, and improved an existing tubewell.

11.37. Neither of the two joint farming societies studied in West Bengal had increased its irrigation potential. The 4 joint farming societies studied in Bihar, had purchased 1 electric pumping set, constructed 1 tubewell and bored 2 more tubewells. In addition, three wells had been constructed and assistance obtained for the construction of two more. In Orissa, out of the 4 societies case-studied, 1 had repaired 500 ft. of water channel. In addition, of the 5 societies for which data were subsequently collected, 2 had purchased 3 pumping sets, whilst 2 others had constructed channels in order to benefit from the lift irrigation schemes of the area. 2 others had applied for loans for the construction of 8 wells.

11.38. In Assam, 2 out of the 3 joint farming societies studied had constructed a tank, 4 kutcha wells and 1 tube-well.

11.39. In Rajasthan and Gujarat, whilst details are generally not available regarding the number of wells constructed, pumping sets purchased, etc., 4 joint farming societies surveyed in Savarkundla spent Rs. 3,300 on the construction of wells, and Rs. 4,300 on the purchase of oil engines and pumping sets. In Sojat block of Rajasthan, the 8 joint farming societies surveyed invested Rs. 26,000 on irrigation purposes. Narainaswami society of Kalol block (Gujarat), had fitted 3 pumping sets on the wells pooled in the society.

11.40. In Madhya Pradesh, 11 of the 16 joint farming societies studied had invested in irrigation. Between them, 23 new wells had been constructed and 12 pumping sets purchased, 2 tanks had been improved and 1 old well repaired.

11.41. As is evident from this, the majority of societies gave the highest priority to increasing irrigation potential. The survey shows that significant results were achieved in this direction.

11.42. Looking to the typology of societies, the case-studies indicate that, in those of type I, where finance was available, as in Dhulia, and in some parts of Uttar Pradesh, the societies immediately invested in irrigation. The small farmers found that it was possible for them to invest jointly, where individually they had not been able to do so. Thus, in one society of Uttar Pradesh, 3 new wells were constructed after the formation of the society. In Andhra Pradesh, Godavari and Krishna societies, both comprising small farmers—many of whom were Harijans—had been able to invest in a pumping set each. One had also repaired an existing well. In other cases, however, where such finance was not forthcoming or where the holdings, were scattered in a number of blocks, it was difficult to increase the irrigation potential of the societies. For instance, one society of eastern Uttar Pradesh disintegrated when, after the purchase of a pumping set, the members could not devise a satisfactory system for irrigating their scattered holdings. In another case, also in Uttar Pradesh, the members joined together in the hope of increasing irrigation facilities. When this hope was not fulfilled, as financial assistance was not provided, the members reverted to individual cultivation.

11.43. Amongst the societies of type II, as the members generally had greater resources and enterprise, almost all the societies studied invested in irrigation. Thus, Vyas society had purchased a pumping set and repaired a tubewell, bringing under irrigation its complete holdings. In Ranwadi society, where no irrigation existed, 29 acres were brought under irrigation. In Ekumbhe, the irrigated area increased from 50 acres to 62 acres.

11.44. The societies of type III, being formed by bigger cultivators, were in a position to draw upon considerable resources. As a result, they had generally invested heavily on irrigation purposes.

11.45. Amongst the societies of type IV, in those of Dhulia, significant steps were taken to increase irrigation potential. For instance, Samantnagar society had increased its irrigated area from 10 acres to 27 acres, whilst Rampur society had brought under irrigation 50 acres, where 35 acres were irrigated formerly. In Madhya Pradesh, in one society, even though the members were cultivating individually, they had been able to raise resources through their society. With the help of these resources they had constructed 7 new wells and purchased a pumping set. In another society, in similar manner, the members had constructed 6 new wells.

11.46. (ii) *Land Improvement*—To a large extent, the capacity of the societies to improve their lands depended upon the availability of external finance. The societies of type I experienced the most acute, difficulty in obtaining such finance, though to a great extent, the same difficulty was experienced in the programme as a whole.

11.47. In the majority of cases studied, the societies had been able to undertake some measures of land improvement, the formation of societies rendering possible the implementation of such measures.

11.48. In certain cases, the individual cultivators would have been altogether unable to tackle the problems faced. To illustrate this, amongst the societies of type I, situated in Uttar Pradesh, in one case, the society was formed particularly with a view to reclaiming alkaline lands and to improve the techniques of cultivation on the other lands of the members. The members had, individually, been trying to improve their alkaline lands since 1957. Where they had not succeeded, the society had, in the brief period of its existence, brought under cultivation about 35 acres of such land by an intensive programme of green manuring, use of farm-manures, chemical fertilisers, irrigation, etc. The possibility of quicker results acted as a spur and as an incentive to members, where individually they had not been able to conceive of such results. In another society of this type in Uttar Pradesh, the members reclaimed 141 acres from forest, 85 acres were levelled, and bunding had been undertaken for a 100 acres. Similarly, in Wardha, the societies of type I were able to reclaim some of the lands belonging to members which had remained uncultivated for many years. The societies also undertook deep ploughing and the removal of shrubs etc. On the other hand, in Andhra Pradesh, the societies of this type were not able to undertake any land improvement measures, owing to absence of external finance.

11.49. Most of the societies of type II undertook land improvement measures. Even though the quantum of external assistance was limited, the societies raised the necessary resources from their members. Thus, in one society of Punjab 20 acres had been reclaimed and bunded at a cost of Rs. 2,140 and 500 feet of water channels had been constructed. In another society, following increase in irrigation facilities and a new compactness resulting from pooling of lands and consolidation proceedings, the society levelled 65 acres in order to realign its water channels. It also replanned the layout of the farm.

11.50. Amongst the societies of type III, as the lands were generally better developed, less efforts were required to improve them.

11.51. Amongst the societies of type IV, in those of Dhulia district, the fields of the members had been bunded prior to the organisation of the societies, when the programme had been undertaken departmentally. In Bihar, where the societies were formed in order to improve particular tracts, land development measures were undertaken as a matter of priority by the societies. In Orissa, the societies of Sambalpur had taken many steps to improve their lands. Thus, one had fenced 30 acres and another had levelled 15 acres. In Madhya Pradesh, remarkable results were achieved by the societies of this type. In two cases, where waste lands had been individually allotted to members, they had been lying uncultivated for many years and their reclamation was clearly beyond the capacity of individual members. After formation of the societies, one reclaimed 180 acres, whilst the other reclaimed 200 acres.

11.52. (iii) *Agricultural practices*—In Maharashtra each of the societies case studied, indicated substantial increase in the use of manures and fertilizers when compared with the quantities used before their organisation. The details in this regard are given on page 44. One society of type I increased its use of manures from Rs. 13 per acre to Rs. 54 per acre, and one society of type IV increased the value of manures used from Rs. 16 to Rs. 60 per acre. As regards the use of chemical fertilisers, there was also an improvement. The practice was, however, restricted owing to the limited irrigated area and the frequency and danger of drought. The societies case studied adopted a variety of improved cultivation practices. Many of these were new to the area and were introduced for the first time by the societies. In addition, a large number of the societies diversified their cropping patterns and increased their area under double cropping.

11.53. In Mysore, whilst the societies of Bangalore, generally used chemical fertilisers, manures and improved seed, in Dharwar, agricultural practices remained traditional. In the former district, the case study of one society indicate that, in the one year of its existence, it used more chemical fertilisers per acre than its members used either before the society was formed, or after the society disintegrated and its members reverted to individual cultivation.

11.54. In Madras, the case studies indicate that the societies generally took to the cultivation of high yielding crops. They also undertook crop protection measures, the use of better seed, chemical fertilisers, etc. In Andhra Pradesh, even the societies formed by small cultivators were able to introduce the use of better seed in their villages. They also used improved implements, which none of the individual farmers of similar status had hitherto been able to obtain. Both the joint farming societies case-studied in Kerala were keen to use better seed. The case-studies indicate that in each of these three states, the societies used their lands more intensively than did the individual cultivators of the area.

11.55. In Uttar Pradesh, the data available regarding the societies case studied, show that most of them had adopted improved seed and better techniques of sowing and cultivation. In Punjab, the performance of societies regarding which data are available, was even better. For instance, in one society, the double cropped area increased from nil, before the organisation of the society, to 20 acres, within a period of three years. Similarly, in another society, the value of fertilisers used rose from Rs. 653 in 1961-62 *i.e.*, before the society was organised, to Rs. 1,138 in 1962-63 and Rs. 1,815 in 1964-65. In another case, whilst members used only Rs. 860 worth of fertilisers before the society was formed, in 1962-63, the value of fertilisers used was Rs. 2,400.

11.56. In West Bengal, both the societies studied illustrate a more intensive use of fertilisers than on the fields of the individual cultivators of the area. In Bihar, whilst less thought was given to improved practices generally, one society had introduced sugar cane cultivation which was a new crop for the village. In Orissa, the societies of Cuttack were reported to be using improved seeds, fertilisers etc. In Sambalpur, they had been able to plan and adopt a number of improved practices, in a 'package' manner, drawing upon the technical guidance and other resources of an IADP district. Thus, one society had introduced a new variety of paddy in its village and, in addition, three new crops in the area. Another society had used chemical fertilisers worth Rs. 3,700 during 1963-64. Almost all the societies studied in the district had their soils tested, and had prepared production plans in consultation with the technical officers of the IADP staff. Some of the societies were acting as registered seed growers and were supplying seed through the Agriculture Department to individual cultivators in the area. Insecticides also were being widely used on the lands of the societies.

11.57. In Assam, too, the formation of societies generally led to the use of improved seeds and fertilisers.

11.58. The capacity of societies in Rajasthan to introduce improved practices was limited by a lack of resources and, to some extent, by inadequate technical guidance. In Gujarat, the societies were in a relatively better position. Chemical fertilisers were being used along with improved seeds. The societies were also purchasing a number of improved agricultural implements.

11.59 In Madhya Pradesh, most of the societies had adopted improved practices and many had invested in better implements.

11.60. Looking to the various types of societies formed, the case-studies illustrate that, in those of type I, the use of improved practices, whilst adopted by many societies, were not adopted by certain others, where traditional leadership and techniques continued. On the positive side, Vijaygopal society (Dhulia) increased the value of its manure inputs from Rs. 15 to Rs. 54 per acre. It also increased the value of fertilisers used from Rs. 284 before the organisation of the society, to

Rs. 1,022 after the organisation of society, which worked out to an investment of Rs. 1.9 per acre and Rs. 9 per acre respectively. The same society undertook intensive methods of cultivation, and crops like Cambodia cotton and chilly were sown. Similarly, in Wardha, Gangakhud society used improved seeds of cotton, jowar and groundnut and undertook dibbling in 6 acres. The chilly crop, which was carefully sown, drew considerable praise in the area. Maharajpet society introduced similar improved practices. In Uttar Pradesh, the society of this type, for which data are available, also generally adopted improved practices.

11.61. On the other hand, some societies formed by small cultivators failed to improve their techniques: this was so for want of managerial and technical guidance, or owing to a lack of resources. For instance, Kolleru society (Andhra Pradesh), failed to adopt any improved practices for these reasons. In Kerala, the two joint farming societies case studied were keen to use improved seed, but were unable to obtain it in time.

11.62. Most of the societies of type II followed improved practices. They had generally succeeded in increasing double-cropped area and the use of fertilisers. They had also invested in improved implements.

11.63. As regards the societies of type III, amongst those of Uttar Pradesh, none had introduced any improved practices. The 5 societies of this type in the Punjab, however, were production-oriented and the members were using improved practices. In Andhra Pradesh, the 1 society of this type had not introduced any improved practices. In Mysore, of the 3 societies of this type, 1 had introduced a number of improved practices, whilst in 2 others, individual cultivation was being followed. In Madhya Pradesh, the societies of this type were highly conscious of the need for better techniques and were effective in their use of them. In most of these societies, better seed was used and the area intensively fertilized. In one society, the area cultivated increased by 111 acres owing to double cropping.

11.64. Amongst the societies of type IV, once again, variations were marked. Whilst the societies of Dhulia adopted a number of improved practices, in other areas, as in Shahabad (Bihar), they were yet to change their techniques significantly.

11.65. From this survey, it will be seen that the capacity of cultivators to adopt improved practices increased with the forming of societies. However, the performance of societies varied according to the availability of resources, technical guidance and managerial skill. In the societies organised around progressive cultivators, it is evident that improved practices were more readily, and fully, adopted; where such leadership was not available, and the members lacked technical guidance, they continued to use traditional techniques.

11.66. (iv) *Mechanisation*—Joint cultivation made it possible to undertake various improvements and practices beyond the capacity of individual farmers. The use of a large number of pumps, electric motors, diesel engines, etc. has already been referred to in detail. At times, the change in scale even necessitated a change in the nature of implements used. Joint farming, therefore, led to a greater use of improved implements like winnowers, threshers, harrows, disc ploughs

11.67. Apart from the use of such implements, owing to the relative shortage of labour, and a general orientation towards machinery, all the societies case studied in Punjab were found to be using tractors. Some of them had fully replaced the use of bullocks by tractors. In Rajasthan, particularly in Sojat block, tractors were also used. Similarly, 9 societies studied in Madhya Pradesh each had one or more tractors. In Gujarat, too, one joint farming society had purchased tractors. On the other hand, in Dhulia, Sambalpur and Mysore, the societies generally relied on bullock power.

11.68. The case-studies indicate that where the use of tractor was necessitated either by the general shortage of labour within the area, or by the quality of the soil which had to be cultivated or reclaimed, their use was beneficial. However, where tractors were employed without taking into consideration the size of the farm, and the labour resource of the area, societies experienced difficulty. Thus, whilst in Punjab, the societies benefited by the use of tractors, and in some of the societies of Madhya Pradesh, organised on waste lands, tractors were also found to be necessary, in certain other areas, as in Rajasthan and Gujarat, the use of tractors was not warranted either by the size of the farms, or the labour resource of the area. In such cases, the large capital investment involved in purchase of a tractor, had a tendency to upset the economy of the farm and, later, create difficulties amongst the members.

11.69. (v) *Productivity*—In assessment over a short period, an exact understanding of productivity, its increase or otherwise, poses certain difficulties. Whilst the performance of cooperative farming societies may be compared with the position obtaining on the plots before pooling, or on plots of similar fertility lying on the outskirts of the cooperative farm, an exact comparison is rendered complicated for various reasons. For instance, seasonal variations are considerable in some parts of the country. In 1962-63, in particular, many of the areas studied had been affected by severe drought. In addition, because of price variations, data available regarding the gross value of production does not always serve as a precise index on the basis of which an assessment of physical productivity could be made. A comparison which does not take these factors into consideration is invalid.

11.70. To illustrate the effect of seasonal variations, the case-studies show that in Dhulia district, the gross value of production in Samantnagar society, which was Rs. 171 per acre prior to the organisation of society, increased to Rs. 206 per acre in the first year after organisation, declined to Rs. 190 per acre in the second year and arose to Rs. 256 per acre in the third year. Similarly, in Ranwadi society, the gross value of production per acre was Rs. 82 (before formation of the society) in 1960-61; it declined to Rs. 59 in the first year of the society *i.e.*, 1961-62, owing to failure of crops. In the second year, however, the gross value of production per acre rose to Rs. 131. In Rampur society (Uttar Pradesh), the gross value of production, which was Rs. 13,394 in 1961-62, fell to Rs. 7,428 in 1962-63. The reason for this decline was the occurrence of serious floods in the latter year.

11.71. As indicated above, the gross yields also depended on the quality of lands pooled. Thus, in the societies of Shahabad (Bihar), where only inferior lands were pooled, yields per acre on the lands of the societies were naturally less than on the lands retained for individual cultivation.

11.72 With these reservations, however, the case studies generally point to an increase in the gross value of per acre production. This increase resulted partly from the greater inputs which the societies were able to provide, and partly from the land improvements effected, either through increased irrigation, or soil conservation measures etc. Whilst the better inputs of seed, fertilisers, etc., illustrated their results immediately, some of the other measures, having a longer gestation period should increasingly illustrate their benefits with succeeding years. The conclusion to be drawn, therefore, regarding the production capacity of societies, should take into consideration the greater potential for future development which they created when compared with the achievement of individual members before the organisation of the societies, and the performance of individual cultivators of similar status during the brief period in which the societies had been in existence.

11.73. Turning now to the data available in the case studies regarding the performance of the various types of societies, in those of type I, yields per acre varied according to the nature of inputs which the societies could afford, the lands pooled etc. Thus, in Vijayagopal society (Dhulia) the gross value of production per acre, which was Rs. 178 before the formation of the society, increased to Rs. 264 per acre in the second year. In the third year, the gross value of production, per acre increased to Rs. 318. The overall value of production, which was Rs. 19,550 in the year proceeding the organisation of the society, increased to Rs. 29,098 in 1960-61 and to Rs. 34,951 in 1961-62. In Barbatpur society (Uttar Pradesh), the gross value of production per acre increased from Rs. 180 in 1961-62 to Rs 194 in 1962-63. On the other hand, in one of the societies of Kerala, yields were lower on the cooperative farm than on the individual holdings of the area. This was attributed to late transplantation of paddy owing to delays in obtaining production finance.

11.74. The societies of type II generally illustrated increasingly high yields in successive years. Thus, in Vyas society, (Punjab), the gross value of production in the society, which was Rs. 14,592 in 1962-63 (the first year after formation), rose to Rs. 20,492 in 1962-63. In 1964-65, it had further increased to Rs. 30,785. Similarly in Rotipur (Punjab), the gross value of production, which was Rs. 15,275 in 1962-63, rose to Rs. 23.511 in 1963-64. In Ekumbha (Maharashtra) the gross value of yields per acre which were Rs. 169 before formation of the society, rose to Rs. 257 per acre after formation.

11.75. As regards the societies of type III, the studies illustrate once again, the factors having a bearing on the yields per acre. For instance, in Badshahpur society (Punjab) gross per acre productivity declined from Rs. 218 in 1960-61 to Rs. 167 in 1961-62, and Rs. 160 in 1962-63. This decline resulted partly from the increased cultivation of newly reclaimed lands, which were yet to be developed. The net sown area, during this period, increased from 65.5 acres to 124.37 acres. On the other hand, in Suratgarh society (Madhya Pradesh), the gross value of agricultural production increased from 1.11 lakhs in 1960-61 to 1.35 lakhs in 1962-63.

11.76. The societies of type IV illustrate similar variations. In Rampur society (Dhulia), the gross value of production per acre increased from Rs. 172 before the organisation of society to Rs. 213 per acre in the second year after organisation. In Kanchipuram (Madras) the value of yields on the lands pooled in the society were 50% higher than on those on which individual cultivation was being practised in the area. On the other hand in certain other cases, yields declined.

11.77. *Farm Management*—Cooperative farming management has two main aspects: (i) that relating to the use of land, bullocks and implements, pooled as a result of the formation of societies—in this may also be considered the economies of scale, if any, resulting thereafter; and (ii), the use of available manpower.

11.78. *Consolidation*—Looking to the first aspect, the case studies show that, generally, the number of fragments cultivated gets reduced considerably in areas where consolidation of landholdings proceedings precede or accompany the formation of societies. This was particularly noticeable in Punjab and parts of Uttar Pradesh. On the other hand, in certain cases in the latter state, the lands of the societies become discontinuous as the consolidation of land holdings legislation did not take into consideration the existence of the societies. In the other states, where consolidation of land holdings legislation did not exist, or where consolidation operations had been stayed, or had yet to be undertaken, the full benefits that could have accrued by the pooling of lands were not achieved. To illustrate from the case studies, in Meerut district, in the area where consolidation of land holdings took place, one of the societies of type I was able to reduce the 29 plots of its members into a single cultivation unit. In another society, 19 plots of the members were formed into a single block after the formation of the society. On the other hand, in areas where consolidation operations were yet to take place, some of the societies of type I, formed by small farmers, disintegrated as farm management was rendered extremely difficult. One of these societies had as many as 49 fragments: their number made it impossible to supervise work, arrange for irrigation, or invest in the land in any agreed manner. In other States, too, like Gujarat, the lands of cooperative farming societies were scattered in a number of places. As a result, the efficiency of the societies was adversely affected.

11.79. In Dhulia (Maharashtra), except in the case of societies organised around a single family, the holdings pooled generally fell in 3 to 8 blocks. It was observed, however, that economies of scale were determined less by the number of blocks, than by their comparative size and the distance between different blocks. Where the blocks were big, and located in one part of the village, it was possible for the labour to move quickly from one block to another without much loss of time. On the other hand, where the blocks were scattered in different parts of the village, it was difficult to achieve economy in the use of labour. As a result, at the time of formation, many societies sought to ensure that only those blocks were pooled which were compactly situated. This resulted, at times, in partial pooling, and, in certain cases, in the loss of working members to the societies formed. Similarly, in Wardha (Maharashtra), at times, members could pool only a portion of their holdings, some plots being isolated from the tract where the major portion of the lands were pooled.

11.80. In general, the experience of the societies studied indicates that, as a result of the pooling of land, the number of plots was reduced and the size of the units of cultivation was increased. This facilitated work supervision, improvements in cropping patterns and a more systematic use of resources.

11.81. *Use of Bullock Power*—Apart from the advantage that accrued in this manner, some of the societies studied were also able to effect savings in the number of bullocks required for cultivation. This was so in Dhulia, where the trend was particularly pronounced in the societies in which the entire land of the members was pooled.

11.82. Comparative data regarding the utilisation of bullock power before and after the formation of the joint farming societies in Dhulia have been given on page 40. The data show that economies to the extent of 25% and more, were effected in the use of bullock power.

11.83. In contrast, in certain other areas, either owing to partial pooling, lack of member-identification, scattered holdings, or improper management, such economies were not obtained. For instance, the study of societies in Assam showed unnecessary unloading of assets. In one case, the members sold 20 of their bullock to the society, though they had pooled only 49 acres. In another instance, the members sold 20 bullocks to the society, though only 44 acres were pooled. This led to wastage of bullock power. In Kerala, the case studies indicate that no economies were possible in the use of bullock power as the lands of the societies were scattered over a considerable area. In Kanchipuram society of Madras, where partial pooling had taken place, inspite of the fact that the lands pooled were situated in one compact block, economies in the use of bullock power were not affected. Owing to incomplete identification of members with their society unnecessary expenditure was incurred on the purchase of 10 additional bullocks, though the size of the farm and the number of bullocks already available did not warrant this.

11.84. Thus the case-studies illustrate that where societies were organised on the right lines, economies in the use of bullock power were achieved; where they were formed with an incomplete understanding of the programme, they were not able to derive this benefit.

11.85. *Extent of Pooling*—The techniques of farm management were conditioned, very considerably, by the extent of land pooled by members and the size of the farm. In most of the societies of Uttar Pradesh and Punjab, members had pooled all their land. In Dhulia, most of the lands were also pooled. In addition, the societies formed by small farmers in Andhra Pradesh, and other parts of the country, generally pooled their lands fully.

11.86. In contrast, in West Bengal, Assam, and Bihar, and in many cases in Orissa, partial pooling had taken place. Similarly, in Madras and Kerala, partial pooling was permitted even in the bye-laws of societies. Where pooling was complete the economies referred to were more easily attainable. In addition, in many cases, it was easier to make significant improvements in cropping patterns, the location of new wells etc. Where partial pooling took place, it was generally observed, as in Bihar and Madras, that lands of inferior quality were pooled. In such societies, members came to feel that it was the responsibility of government to develop the pooled lands; they, therefore, participated less in farm operations. Only in Sambalpur (Orissa), was it observed that partial pooling did not primarily lead to inferior lands being pooled. In this district, whilst members initially pooled a small part of their holdings, they restricted the area because they felt that their available resources would be inadequate for a larger area. They intended, however, to phase the pooling of their remaining lands as their resources increased. In some societies of this district, members had already fully pooled their land.

11.87. *Employment, in farm and other activities*—The pooling of land and manpower does not, by itself, step up employment as the average land-man ratio remains constant following the formation of a joint farming society. Indeed, if there is no change in the nature of work undertaken and the techniques adopted, initially, the formation of a society is likely to transform disguised unemployment to open unemployment, owing to a more rational use of labour which converts underemployed men into unemployed men.

11.88. On the other hand, the case-studies illustrate that the capacity of societies to provide employment has increased (a), with the undertaking of land improvement measures and capital works which were necessary for fuller land utilisation and better agriculture; (b), with an increase in the intensity of cultivation, change in cropping patterns etc., adopted for current agricultural operations and (c), with the undertaking of allied activities like dairying and sheep rearing and the development of non-farm occupations through cottage industries etc. An indication has already been given of the measures taken to improve land and the intensity of cultivation.

The impact of these measures on employment may now be considered. In assessing the position, certain problems arise: base-line data regarding the employment obtained by members before the organisation of a society are frequently not available; in certain cases, an exact understanding of the position is rendered more difficult as data are not available regarding self-employment on the individual farms: these render complicated a comparison with the position obtaining after the organisation of the society. Similarly, in gauging the impact of developmental measures and intensive practices on employment, it is sometimes not possible, from the data available, to isolate clearly the labour component on the development work or to separate it from the other components involved.

11.89. Inspite of this, certain important trends can be observed and conclusions drawn from the case studies. Looking, first, to the impact of land improvement measures and the consequent intensification in techniques, the survey shows that there was a significant increase in employment in the societies formed in Dhulia. Thus, in Vijaygopal society (type I), the wages paid per acre increased from Rs. 69 in the first year of the society to Rs. 88 in the second year. In Ranwadi society (type II), the wages per acre increased from Rs. 29 to Rs. 53. In Samantnagar society, (type III), wage payments per acre were Rs. 48, Rs. 53 and Rs. 56 during the first, second and third years respectively. In Rampur society, (also of type III), whilst wage payments per acre were Rs. 43 in the first year, they were Rs. 65 in the second year. As wage rates remained constant, or showed only a small rise, the increase in wage payments illustrates a clear increase in employment. The total wage payments of the societies case-studied in Dhulia showed an increase of 22.3% in the second year of the societies when compared with their first year.

11.90. Within this overall increase in wage payments, it is interesting to observe the manner in which greater employment was created. In Rampur, whilst 18% of the wages distributed in the first year went for land development and the deepening of a well, in the second year only 7% went for these purposes. On the other hand, in the second year, overall employment was stepped up (a), by intensive cultivation of crops like chilly, banana and cambodia cotton, which required an increase in wage payment of 64% when compared with the wage payment on cultivation in the first year; (b), by adding another member who pooled a further 20 acres in the society; and (c), by introducing dairying and sheep rearing, which required full-time attention from 2 persons. Similarly, in Vijaygopal society, whilst well sinking and improving existing wells accounted for 22% of the wage payments in the first year, and only 4% in the second year, employment increased in the latter year with additional irrigation and intensive techniques. Wages paid for the cultivation of crops, many of which were new, represented an increase over 4% on the wages for cultivation in the first year. In addition, the society provided employment in the construction of a godown. Comparable trends were noticed in Ranwadi society where, even though wages on well construction fell from 40% in the first year to 2% in the second year, new cropping and cultivation techniques, the construction of a silo pit and the starting of a poultry unit stepped up employment as a whole. The wages on cultivation were more than double those spent in the first year on this purpose.

11.91. Evidence even over a short period, therefore, points to increasing employment. Development measures in the first year led to more intensive cultivation in the succeeding year. This was accompanied by an increase in the demand for labour. In Rampur and Vijaygopal, the number of members working on the land, increased from 6 in the first year to 12 in the second year after formation. In Ranwadi and Samantnagar, new members were added in the second year. In addition, both Ranwadi and Rampur increased their non-member farm servants by 3; in Vijaygopal, whilst the number of members and farm servants remained constant, casual labourers were employed on a larger scale in the second year.

11.92. At times, the societies sought to overcome disguised unemployment through a more rational use of time. In one case, the plucking of cotton pods was postponed by a few days to a time when there was less work on the farm. In another case, members dug their wells and made ropes from fibre during the season when work on the farm was slack.

11.93. Similar trends were observed in other pilot projects. Thus, during 1962-63, in Lassikhana society (Punjab), 10 out of 12 members were provided employment for over 300 days each. Because of the intensive practices followed, this society had the highest gross value of yields per acre amongst those studied in Punjab. In addition, the land reclamation measures undertaken by various collective farming societies, to which detailed reference has been made earlier, provided employment on a significant scale. In those societies which had reclaimed their lands, intensive cultivation often led to an increase in the level of employment. For instance, Krishnaguri society of Assam reclaimed 67 acres of waste lands. At the time of study, its gross cropped area was 155 acres, members working all the year round in order to double-crop and even treble-crop the available land.

11.94. Whilst the capacity of cooperative farming societies to step up employment in this manner has been clearly illustrated, in many cases, the absence of developmental finance limited their ability to do so. Where finance was available, as to the societies of Dhulia and Madras, land improvement measures and capital works led to distinct increase in overall employment.

11.95. In view of the size of holdings, and the need to provide fuller employment both to members and their families, the desirability of developing cottage and village industries as an integral part of the programme of cooperative farming was stressed in the scheme of pilot projects. The case-studies, however, indicate that, by and large, the office bearers and members, as also the officials responsible for guiding the programme, were not always fully conscious of the crucial need for such activities. As a result, with a few notable exceptions, little organised effort was made, or technical support provided, for this purpose. The study also shows that in the starting of activities like dairying, piggery and poultry keeping, for which the members had traditional skills, or for which the skills could easily be developed, the inadequacy of finance proved a serious handicap.

11.96. The data available in the case studies regarding the impact of such activities on employment may now be considered. In Durg district (Madhya Pradesh), where all the societies studied had introduced such activities, the effect on employment was clearly illustrated. Thus, in Suratgarh society, 6 persons were engaged in looking after the dairying unit, whilst 1 person looked after the poultry unit of 200 birds. Some other members are reported to have been sent for training in gur-khandsari making, whilst the society was also running a consumers' store profitably. In addition, the same society was operating 17 units for the hand-pounding of paddy, providing employment to the local women. For handmade paper, the society was engaging 18 persons who would find employment for 8 months in the year. 4 of them had received training in this craft. A brick kiln and an oil crushing unit had also been started by the society. Similar trends were observed in the other societies formed in this area: 3 societies had taken to dairying, 4 to poultry keeping and 2 to pisciculture. In addition, 5 societies had started handpounding of rice and 3 had started oil crushing units. Each of these activities had been started on a viable scale. As a result, the units were running efficiently and providing employment not only to members and their families but also to others in the area.

11.97. The case-studies illustrate that in other areas, too, such activities were undertaken. In Savarkundla block (Gujarat), at the initiative of a social worker, assistance was obtained by one society to start an oil ghani unit. Ambar charkhas were also obtained from the Khadi & Village Industries Commission. Data regarding the economies of these activities are, however, not provided. A number of societies in Gujarat, Uttar Pradesh, Maharashtra and Mysore started flour mills. These helped both the members and non-members.

11.98. In Dhulia, dairying provided both additional employment and income. The example of Rampur society has already been given. In Samantnagar society, experience was similar. The dairying unit, which began with 11 buffaloes, earned a profit of Rs. 3,400 in the first 6 months after being started. The survey underlines the need for proper marketing and technical guidance. Without them, full advantage cannot be derived from such activities. In certain cases, losses were incurred either because marketing arrangements were defective, or technical guidance inadequate. This was particularly so in poultry keeping, where morality amongst the birds was sometimes high.

11.99. It will be seen from this that the formation of societies had in many cases, led to the creation of new opportunities for employment. Many of the measures taken would not have been possible and individual cultivation continued. By their nature, these measures required joint arrangements for execution and maintenance. The type of operation or the degree of investment required, also transcended the limits of an individual farmer. In addition, cooperative farming provided an organisational structure that released idle labour and permitted its more rational use for such activities.

11.100. At the same time, the case studies illustrate that a great deal remains to be done to direct the planning of cooperative farming societies towards a fuller understanding of the methods by which they can increase employment and income. The studies also show that where partial pooling of lands has taken place, or member-participation in farm activities is low, the employment-providing activities undertaken have benefited non-members rather than members. For instance, in Kanchipur society (Madras), though many of the members were small farmers, because of partial pooling, they, too, did not identify themselves fully with the society. As a result, inspite of heavy investment in land improvement measure and improved practices, which led to greater employment and production, members did not benefit. This was because it only entrusted the execution of land improvement measures to contractors, but also performed normal agricultural operations through hired labourers. In other cases, too, where the members were predominantly absentees, 'white-collared' or non-working, the employment potential created benefited non-members rather than members.

11.101. *Work Allotment and Assessment*—Amongst the techniques of farm management, those relating to the allotment of work and the assessment of performance are of considerable importance. The studies show that most of the societies were still to devise satisfactory procedures and that they were grouping towards possible solutions. In some of the older societies, however, where leadership was provided by progressive cultivators, the concept of work teams and norms was tried. Some other societies introduced a system of fixing annual salaries, which were determined on the basis of the capacity of the worker and the nature of his duties. Among the older societies, Suratgarh in Madhya Pradesh, had divided 845 acres of land into two sectors, each sector was under the overall charge of a leader who was responsible for implementing the production plan, distribution of work, allotment of labour, maintenance of wage accounts, etc. Each sector was sub-divided into two blocks, for which there were sub-supervisors.

11.102. Apart from the problem of incentives, the societies were also faced with the problem of managerial costs. In certain cases. these were high. In one society in Mysore, consisting of small farmers, the appointment of a whole-time paid manager, merely for purposes of supervision, was resented by the members who felt that this would lead to disproportionate overhead costs. In Madras, although the overhead costs were heavy they were not reflected in the accounts of the societies, as Government itself met the cost of a senior Inspector and field-man in each society. In Dhulia, after a period of experimentation, members decided to pay only nominal wages to those who performed supervisory functions.

11.103. *Distribution of Gross production and Returns to Members*—Variety of methods were followed in the distribution of gross production. Local practices, the nature of membership and the requirements of the farm, determined the returns for membership of the land pooled by members, for remuneration of work, for re-investment in the farm and the creation of essential reserves.

11.104. Looking to the return for ownership, the case studies show that, generally, this was considered a first charge on the gross production. In States like West Bengal and Bihar, 40%—50% of the gross production was distributed as the return for ownership. In Punjab, on the other hand, 33% of the gross production was distributed in this manner. In Uttar Pradesh, in the societies formed by small cultivators. the return for ownership of land was generally restricted to 20%—25% of the gross production. In one case, a joint farming society of this type did not distribute any return on land. On the other hand, in this State, where the society was dominated by large landowner, who was also non working, the return for ownership of land was equivalent to the rate of share cropping in the area.

11.105. In States like Maharashtra, Mysore and Gujarat, where the return for ownership of land was determined in terms of the value of lands pooled, difficulties sometimes arose owing to inaccurate assessment of the lands. At times, the lands were valued at a premium, in other cases, a uniform scale was applied irrespective of the quality of the lands pooled. Both such procedures led to discontent. The case-studies indicate that in Dhulia the return for ownership of land was normally limited to 6% of the valuation of the land. In certain societies, however, the land owning members took 9% of the land valuation, the additional 3% coming as bonus on the return for ownership. At times, in this district, the return for ownership of the land pooled was distributed even though the societies incurred overall losses. This was so as the members considered such a return the first charge on the gross production.

11.106. Work on the farm was generally remunerated according to current market rates. Where societies stepped up employment, in the manner indicated earlier, this implied increased income to working members, particularly those amongst them who were landless. In certain cases, higher rates were given by the societies with a view to providing an incentive for work on the farm. A few societies provided a bonus on the work done by members. For instance, one society of Mysore distributed a work bonus of Rs. 4,742 on a wage payment of Rs. 11,855. In Savarkundla block (Gujarat) following the example of a collective farming society, members of the joint farming societies did not claim any return for land ownership. Instead, after meeting current farm expenditure and providing for essential reserves, these societies distributed 70% of the remaining income as wage bonus, and utilized the remaining 30% for building up a land development fund, charitable purposes fund and distributing bonus to its staff.

11.107. In some societies, fixed salaries were paid to the members. These were generally determined according to the skill and capacity of the individual member. As indicated earlier, in Dhulia, in some societies, those who engaged only in supervisory work were paid lower salaries than those who participated in farm operations. This arrangement benefited the actual workers, particularly those who did not own land. In contrast in Punjab, the interests of the landless members and the land owning members were less equitably balanced. In some societies of this state, the salaries fixed for the landless members were lower than those of the land owning members. In addition, whilst the return for ownership of land increased significantly with the increasing gross production, the salaries of the landless members were kept relatively low inspite of the growing prosperity of the farms.

11.108. The case studies indicate that, to some extent, remuneration for work was limited by the need to plough back the additional income into the farm. This need was particularly felt as most of the societies were in their initial stages and considerable investment was still necessary on land, equipment etc. The return for ownership of land was generally considered a first charge on the gross production; and the societies drew upon the additional income accruing from production for re-investment. This had the result of limiting or keeping low the remuneration for work. Similarly, after providing for essential reserves out of the net profits in the manner stipulated in the byelaws, many societies were not in a position to distribute a wage-bonus. In Punjab, as an adult fee was charged at a substantial percentage of the net profits, the societies were, in certain cases, reluctant to declare their net profits. As a result, it was also not possible for them to declare a bonus on the remuneration for work.

11.109. *Financial assistance from Government*—The case studies illustrate that, in Madras, societies were provided financial assistance from government on an average of Rs. 57,000 each. This assistance was provided taking into consideration their developmental schemes and other requirements. In other states, however, assistance to societies was generally limited to the existing pattern of assistance approved under the cooperative plan. In some areas, as in Andhra Pradesh, even this assistance was not provided in full; at times, considerable delay occurred in providing this finance.

11.110. Assistance from the funds of the other developmental departments was generally not forthcoming. This was partly owing to procedural difficulties arising from the fact that cooperative farming societies were not recognised as separate entities for purposes of financial assistance. In a few areas, however, resources from the various departments were beginning to flow. This was either owing to the initiative taken by the leaders of the societies themselves, or because of a few enthusiastic officials.

11.111. The case studies indicate that in certain areas of Madhya Pradesh, Gujarat, Mysore and Uttar Pradesh, assistance from the Khadi and Village Industries Commission was also availed.

By and large, however, it can be said that the finance provided by government was inadequate to the requirements of the programme. As funds under the existing pattern were not related to the size of the farms, and their requirements of land development, in certain cases, societies divided into two, in order to draw additional assistance. In one village, 4 societies were formed in order to maximize the availability of finance. In addition, in the absence of a specific provision for agro-industries, societies found it difficult to take up such activities.

11.112. *Cooperative Finance*—The intensive use of inputs and many of the improved practices followed in Dhulia resulted from the volume of crop finance provided by the central cooperative bank. The contribution by the Dhulia bank has been indicated in detail on page 33. In another district of the same state, owing to the absence of similar support from the central cooperative bank, the societies experienced considerable difficulty in making intensive efforts to step up production. In Mysore, as the central cooperative banks did not provide finance, the societies were compelled to use the assistance received from Government (as share capital contribution and medium term loans). for meeting current farm expenditure. In Madras, whilst the central cooperative banks provided short term credit according to the production plans of the societies on the basis of a government guarantee, in Andhra Pradesh, inspite of a similar guarantee, the position was extremely serious. In Kerala, the case studies indicate that delays in the sanctioning of loans affected the working of societies. In Uttar Pradesh, generally, the societies were not being financed according to their production requirements. In Punjab, the central cooperative banks advanced only upto Rs. 5,000 as clean credit. For further short-term requirements, the societies were expected to mortgage their lands. In West Bengal, Bihar and Assam, finance did not flow to cooperative societies according to their production plans. Indeed, in Bihar, the central cooperative banks did not recognise societies for purposes of loaning; the banks, instead, required members to apply for loans individually. In contrast, in Sambalpur district of Orissa, the central cooperative bank played a vital role in encouraging cooperative farming societies by providing finance according to their production plans. In Rajasthan and Gujarat, whilst production credit was available in Sajat, Savarkundla and Kalol blocks, in Umerain block (Rajasthan), no credit whatsoever was advanced by the central cooperative bank. This compelled members to obtain short term loans, at exorbitant rate of interest, from private money-lenders.

11.113. Except in Dhulia, in no other area was medium term loan provided. No long term loans were made available.

11.114. The case-studies show that with the pooling of lands the capacity of members to raise loans for consumption and ceremonial purposes, and for the redemption of old debts, becomes extremely limited. To meet such demands, in some societies, the members were advanced loans, either against their anticipated return for ownership, or against their wage earnings. However, the problem remained largely unsolved. In certain cases, this resulted in the societies being unable to market their produce to the best advantage—members taking their share of the produce immediately after harvesting in order to repay money lenders. In addition, the inability of members to raise loans for such purposes often resulted in partial pooling, members retaining a part of their land as a security against which loans of an urgent nature could be raised.

11.115. *Technical Guidance*—The question of technical guidance has two aspects (i) that required to assist societies in their programmes of agriculture, animal husbandry and industries; and (ii), that required to assist them in matters relating to farm management.

11.116. As regards technical guidance of the first kind, the case studies indicate that, generally, it was not provided in adequate or continuing manner. The arrangements made in the staff of the block, the development department, and the special staff appointed under the programme also varied. In most of the states, a whole-time officer of the rank of Deputy Registrar or Joint Registrar had not yet been appointed at the state level to guide the cooperative farming programme. In even fewer States was an officer of the Agriculture Department associated with the planning and implementation of the programme at that level. In many States, even for the pilot projects, special staff had not been appointed in adequate number. The problem of assisting non-pilot societies was even more acute, as they were widely scattered.

11.117. It was observed, generally that whilst before the registration of societies, the departmental officers of the area looked into the economics of the proposal and also made certain suggestions regarding the production plans to be followed, their interest did not continue long after. In addition, in many areas, the existence of cooperative farming societies was not recognised by certain departments. For instance, in some states, the departments for electricity, irrigation, and cane development ignored the requirements of cooperative farming societies.

11.118. On the other hand, in some areas, efforts were increasingly being made to ensure that technical guidance was provided in a sound and continuing manner. In particular, the Sambalpur experience points to the methods that can be adopted to ensure such guidance. In Maharashtra, with the growth of societies in Dhulia, it was found that a stockman could be specially appointed to look after the sheep rearing programmes of a cluster of societies. In Gujarat, at the pilot project level, the Project Officer generally had an Agriculture degree. Where he was drawn from the Cooperative Department, he was assisted by an Inspector who was qualified in Agriculture.

11.119. The case studies show that in areas where the programme was provided the lead by progressive farmers, and where it had gathered momentum, it became increasingly important to ensure that the staff posted had the specialised knowledge which the members required. Where the staff was not this calibre, it served little purpose.

11.120. Guidance required to assist in the managerial aspects of the working of societies was also crucially important. Many of the societies formed by small farmers and landless labourers were not able to maintain proper accounts. In certain cases, this led to a lack of confidence in the leaders. In the absence of proper managerial techniques and accounting procedures, a number of societies which made a good start, came to grief. Experience shows that, besides promotional work, which creates enthusiasm amongst the members, efficient management is necessary for the proper growth of the societies formed.

11.121. *Collective Farming Societies*—A total of 19 collective farming societies were case-studied. In addition, in Rajasthan and Gujarat, schedules were canvassed for 7 and 8 such societies respectively. In Maharashtra, apart from the 1 collective farming society case-studied, data was collected by schedules in respect of 4 others.

11.122. Whilst many of the problems facing collective farming societies were similar to those confronting joint farming societies, some were more acutely felt, and some others were unique, on the other hand, collective farming societies did not have to encounter the difficulties arising from the attachment of members to traditional individual holdings. The various aspects of the programme relating to the working of these societies may now be considered.

11.123. *Membership: Leadership, Motivation and Identification with the Society*—In 31 out of 33 collective farming societies surveyed, the bulk of the members were formerly landless labourers. In one of the remaining 2 societies, the membership was mixed—being drawn chiefly from ex-servicemen and landless labourers. In the other, the dominant membership came from one family of large land owners, who, with a view to safeguarding their lands from ceilings and tenancy legislation, formed a society, in which they vested the ownership of their land.

11.124. In the societies formed by landless labourers, most of the members belonged either to the scheduled castes or the scheduled tribes. Generally the members were drawn from the socially handicapped, though in certain areas, as in Maharashtra, some members were also drawn from other communities.

11.125. The nature of membership was of primary importance, as it determined, to a large extent, the level of performance, enterprise and resources.

The non-official leadership provided to the collective farming societies was in the main, of three kinds :

(i) that provided by the traditional leaders of certain landless communities, as in Rajasthan and Andhra Pradesh,

(ii) that provided by special and political workers, as in Gujarat and Orissa, and

(iii) that provided by ex-servicemen, as in Dhruv society of Uttar Pradesh.

11.126. Whilst in nearly all the societies studied, members worked with a high degree of cooperative endeavour, managerial problems arose in societies of the first kind owing to the lower level of education, and a lack of experience in farm management. In certain cases, where the societies of landless labourers had to fend for themselves, the members also lacked an understanding of the programme. Thus, in 2 societies of Maharashtra and 1 of Madhya Pradesh, where the members belonged to scheduled tribes, the societies had either still to begin joint efforts, or had reverted to individual cultivation. On the other hand, where leadership was provided by social and political workers, the societies were able to benefit by the advice, and undertake a variety of activities. Where the leadership was provided even by more educated members of the landless community, results were encouraging. Thus, Kanjoor society of Kerala, which had a multi-caste membership with a higher level of education, achieved promising results. Where a collective farming society was provided leadership by ex-servicemen, as in Dhruv society (Uttar Pradesh), it served as an example in the area.

11.127. Apart from 4 collective farming societies, which were practising individual cultivation, and 2 others which were yet to clear the forest land recently allotted to them, the 27 other societies studied illustrate a high degree of member-participation in the conduct of farm operations. In each of them, the bulk of the work done on the farm was performed by the members themselves.

11.128. The case-studies of 2 of the older collective farming societies, however, illustrate pointedly the difficulties that can arise owing to the uncertain nature of the tenure on which lands were often allotted to collective farming societies. Both Kanjoor society in Kerala (registered in 1944) and Kaitholi society in Orissa (registered in 1951) had been through many vicissitudes owing to their periodic eviction from the lands under their cultivation. Because of this constant threat, their membership was fluid in character; worker joining or leaving, according to the availability, or otherwise of land. The case-studies also show that, in many states, lands were provided only on an annual lease. This, once again, led to a sense of uncertainty amongst members. In certain other cases, as in Andhra Pradesh, delays in the allotment of land sometimes dampened the enthusiasm of members.

11.129. *Agricultural Production*—The results achieved by the societies depended, to a large extent, on the nature of lands allotted and the tenure on which they were provided. In addition, the resources available to members, and their level of enterprise, also had a considerable bearing on their performance.

11.130. *Land Improvement*—The first task of all the collective farming societies surveyed was to improve the quality of their lands. In many cases, this implied a major programme of reclamation. Whilst in a few cases, the process of reclamation was assisted by the tractor organisations of government, in the majority of cases, the members provided their own labour to reclaim their lands. In many cases, they stated that the speed and extent of reclamation would have been inconceivable had they tried to reclaim portions of this land individually.

11.131. To illustrate, the data provided shows that 2 societies of Andhra Pradesh reclaimed 301 acres between them, 2 societies of Uttar Pradesh reclaimed 516 acres, 5 societies of Mysore reclaimed 248 acres, 5 societies of Maharashtra reclaimed 1,540 acres, 2 societies of Assam reclaimed 166 acres, 6 societies of Rajasthan reclaimed 859 acres, whilst 3 societies of Gujarat reclaimed 148 acres. When it is remembered that financial assistance for land reclamation was often not provided, or, where provided, generally restricted to Rs. 4,000 available under the pattern of assistance, the performance of members must, in many cases, be considered truly remarkable.

11.132. Along with reclamation, some societies had also to undertake levelling and bunding. Thus, Dhruv society (U.P.), which had reclaimed 283 acres from forest, found it necessary to level 155 acres and undertake bunding thereafter.

At the time of study, however, large portions of the lands allotted to certain societies were still to be reclaimed and made fit for cultivation—this was particularly so in Rajasthan.

11.133. *Increasing Irrigation*—Insecurity of tenure, and the prior use of limited resources for land reclamation, restricted the capacity of collective farming societies to invest in irrigation. Even so, the data available shows that 9 new wells were constructed by them, 6 pumping sets were purchased, 1 tank was improved, whilst Dhruv society constructed 2 tube-wells.

11.134. *Agricultural Practices*—The nature of membership illustrates most clearly the types of agricultural practices adopted. In the societies formed by members of the backward classes, traditional techniques continued to be used. This was illustrated in the societies of Umerain block (Rajasthan), where investment per acre varied between only Rs. 17 and Rs. 28.7. In areas where social workers guided the societies, as in Savarkundla (Gujarat), a beginning was being made by the use of improved seeds for the major crops sown. On the other hand, where some members had a higher level of education or enterprise, a variety of better practices were adopted. For instance, Kanjoor society (Kerala), was increasingly stepping up its double cropped area. On some of its land, three crops had been introduced. The society had also sown rubber (60 acres), pineapple (20 acres), and a variety of other high yielding crops. In Assam, Krishnaguri society, whose net area was only 67 acres, increased its gross cropped area from 93 acres in 1960-61, to 155 acres in 1962-63. In Uttar Pradesh, Dhruv society had invested in a tractor and a variety of improved implements. It was using better seed and chemical fertilisers and following a number of improved cultivating techniques.

11.135. *Productivity*—Here again, the results varied in the same manner. In Umerain block (Rajasthan), in most societies, the members were still trying to solve the problems of reclamation and land improvement, yields per acre were therefore extremely low. In one society, which had been in existence for 3 years, the members were able to raise a crop that was worth Rs. 92.3 per acre. In Savarkundla (Gujarat), similarly, yields were low. In Mysore, the collective farming societies, formed of landless labourers, incurred an expenditure of Rs. 6,746 on the cost of production, whilst yields were worth only Rs. 1,376. The societies had been allotted lands of extremely inferior quality, which required investment on a large scale. Such investment, the members had not been able to provide. The study raises doubts about the wisdom of alloting such lands.

11.136. On the other hand, where the lands had been improved, yields were significantly better, and, in certain cases, higher than those obtained by individual cultivators in the area. Thus, Kanjoor society (Kerala), obtained an increase in the gross value of production from Rs. 10,747 in 1957-58 to Rs. 50,972 in 1962-63. In Kaitholi society (Orissa), the gross value of yields per acre were Rs. 236 on the lands of the society whilst they were only Rs. 70.9 on the fields of non-members in the area. In Dhruv society (Uttar Pradesh), the gross value of production was Rs. 70,000 in 1959-60, per acre yields being Rs. 162. In 1961-62, the corresponding figures rose to Rs. 75,000 and Rs. 199 respectively. Owing to adverse climate conditions, they declined to Rs. 50,000 and Rs. 147 respectively in 1962-63.

11.137. *Farm Management*—The lands of collective farming societies were generally situated in a few compact blocks. There were. however, exceptions to this, as in Gujarat. The benefits gained by the societies, through the compactness of their holdings, were, however, off-set in certain cases either by the nature of the land allotted, or the insecurity of tenure. In one society of Mysore, formed in a gramdan area, only 18 acres were available. By and large, though the size of collective farming societies provided the potential for a wider land-base than did many of the joint farming societies.

11.138. The case-studies illustrate, that in matters of farm-management, the societies formed of landless communities experienced considerable difficulty. The members were generally unable to maintain proper accounts or records of work. They were also yet to think in terms of work teams and norms. On the other hand these societies were often marked by a great deal of fellow-feeling amongst members.

11.139. In the other collective farming societies, where guidance was provided by social workers, or where the members themselves were educated, the quality of farm management was distinctly higher. Amongst the older collective farming societies like Dhruv and Kanjoor, this implied a more careful and systematic use of the labour resource of members, through the organisation of work teams, a system of supervision through group leaders, and, in the former society, a system of norms for daily work assessment.

11.140. Most of the collective farming societies were yet to organise agro-industries. In most cases, this resulted from the limited nature of the owned resources of members and their incapacity to raise them from outside. Here again, however, there were exceptions. For instance, Dhruv society was running dairying, piggery and poultry units. In addition, it had started a flour mill and a saw-mill. In Mysore one society had taken to sheep rearing whilst another had started a small fibre industry with the help of the Khadi & Village Industries Commission. In Savarkundla (Gujarat) one society had started a dairying unit. It was also rearing sheep. In addition, it had started a flour mill and an oil-crushing unit, whilst its members had been supplied with ambar charkhas.

11.141. In the distribution of gross production, as is to be expected, a large percentage went to members as remuneration for the work performed. In certain cases, a work bonus was also given. Thus, Dongardara society (Maharashtra), distributed 40 per cent of its profits (Rs. 2,984) as wage-bonus in one year, and 25 per cent of its profits in this manner in the second year. In the three years of its functioning, the society had built up reserves amounting to Rs. 4,206. In Dhruv society (Uttar Pradesh), Rs. 4,286 was distributed as wage-bonus to members in one year. The society had built up assets worth Rs. 1,04,094.75, Rs. 64,000 having been invested on power driven implements, tube wells etc. Similarly, over a period of years, Kanjoor society (Kerala), had been able to raise the total value of its assets from Rs. 40,896 in 1954-55 to Rs. 1,25,782 in 1962-63. Both Dhruv and Kanjoor societies were, in addition, providing various facilities to members *e.g.*, milk, vegetables etc. at a nominal rate. In Savarkundla block (Gujarat), the method of distributing income followed by Datanagar society, was adopted by all the other societies of the area, including the joint farming societies.

11.142. *Finance*—Difficulties in obtaining financial assistance were even more acutely felt by collective farming societies than by joint farming societies. The scale of finance required by them was greater, and the resources provided were generally inadequate. Whilst assistance under the cooperative Plan was usually provided according to the pattern of assistance, few societies could draw resources from other departments. In Rajasthan and Mysore the position was particularly acute as the lands required heavy capital investment. A few societies were able to raise resources because of the greater enterprise of their leaders. Reference has already been made to them whilst indicating the various steps taken by societies to increase agricultural production, start agro-industries etc.

11.143. As regards finance from cooperative agencies, the position was similar. Very little medium-term credit was available, and no long-term finance was provided. In certain areas like Rajasthan, even short-term credit was not available. As a result, members borrowed from money-lenders and handed over their shares of the produce to them.

11.144. *Technical Guidance*—Here again, the difficulties experienced by collective farming societies were similar to those of joint farming societies. In certain areas, the collective farming societies required even more technical guidance. This was particularly so where their lands were uneconomic and where the members themselves lacked in knowledge and enterprise.

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CHAPTER XII

RECOMMENDATIONS

Before proceeding with framing recommendations on the basis of the study of the existing situation in relation to cooperative farming, it is necessary to set out the assumptions and the approach on which they are based. It is assumed that the programme of cooperative farming is directed, in the main, towards the solution of problems presented by the class of small or "uneconomic" cultivators in the Indian economy. The number of families in the countryside in this class is very large and the area of cultivated land controlled by it is estimated at not less than 15 per cent of the total. Programmes as that of technical assistance and of cooperative credit and marketing find the greatest difficulty in serving this class effectively. The land surface controlled by it is, therefore, even less well-used than the average and the class suffers from a very high degree of underemployment. Cooperative joint farming by bringing together, under one management, lands held by a large number of uneconomic holders creates a land base on which technically efficient and economic operations become possible. To realise this possibility it is necessary that the pooled land pieces are of suitable sizes and are suitably placed in relation to each other. Moreover, as the capital resources of the uneconomic holders are notoriously meagre, these have to be appropriately enlarged in the initial stages to bring about needed technical improvements in the management of pooled lands.

12.2. Efficient management of pooled lands implies that the total input of labour on the cooperative joint farms, for the same types of productive enterprise, is less than that on scattered individual holdings of which they are composed. It will happen that the development of pooled land resources will absorb some labour in the initial stages and that if such development results in intensifying agricultural activity there would be some permanent increase in the level of demand for labour on the cooperative joint farm. However, possibilities in these directions are usually somewhat limited. Therefore, sooner or later cooperative joint farms, even when they succeed in considerably improving the use of pooled lands, find agricultural activity insufficient to employ the pool of labour in the families composing the membership of the cooperative farming society.

12.3. Insufficient attention is often paid to this aspect of the pooling of labour resources as a result of the formation of a farming cooperative. The pooling of lands affords an opportunity to the cooperative, the pooling of labour may be said to present it with a challenge. In the long run, as the opportunities presented by the land pool become fully exploited and as the pool of labour increases, the need for non-farm utilisation of labour resources is bound to be felt keenly. Obviously the first attempts in this direction will be related to the existing base of agricultural enterprise. But these may prove insufficient and other forms of utilisation such as other industry, transport, labour contract or even production of articles for direct consumption of membership may be attempted. Thus, though initially a joint cooperative farming society may be and is directed mainly towards farming and agriculture, it must as a continuing organisation, be looked upon as a business which is set up with certain pooled resources and which is under compulsion to undertake diversified economic activities for the fuller utilisation of its pooled resources of labour.

12.4. If the above presentation of the objectives and the dynamic of cooperative farming societies of small or uneconomic holders is accepted, it enables the identification of a number of sensitive areas for the policy makers. Initially, there is the proper pooling of land and the supply of needed capital resources. Next, there is the fullest development of land resources and the intensification of agricultural activity and finally, there is the continuous need to diversify and to seek new fields of activity for the employment of labour.

12.5. All these steps have to be considered in the context of the human problems of the operation of a cooperative joint farming society. Such a society differs strikingly from most other types of cooperative activity. In these other types the separate identity and part activity of the member unit organizations is maintained and there is pooling of resources and activity only in relation to some defined field or fields. In a joint cooperative farming society the household as a consumption unit alone remains separate; usually as a production unit it loses identity both as to activity and as to command over resources. Against the background of normal operations in a rural society of family farmers, this loss of initiative and independence is bound to be keenly felt and must create many complete problems, human and administrative. It will be possible to deal with these adequately only if the total performance of the joint cooperative farming society is outstandingly different from that of independent small holders and the standard of living and opportunities afforded by it to member families are demonstrably better than those enjoyed by the independent small holders. This aspect of the operation of a joint cooperative farming society endows with special importance efforts at land development and of diversification of activity for full utilisation of labour of these societies.

12.6. With the development of this approach, it becomes clear how careful experimentation and full support of non-official opinion and leadership are needed to make progress with cooperative farming. The potentialities of this form of organisation to solve problems of small farmers must first be widely realized and, next, a sufficiently large number of groups of such farmers must be encouraged to form societies and must be carefully guided and assisted in the period of development. Non-official leadership and official technical and financial assistance must work together in this cause.

12.7. Categories of farmers, other than small holders, may also form joint cooperative farming societies and these may achieve a much better utilisation of pooled resources through joint effort. However, the national programme of cooperative farming is not directed essentially towards these. This is because even as independent units they can achieve a minimum level of efficiency in the use of resources and taken advantage of and participate in national programmes of development; and because specially strong efforts and strong motivation are needed to make a success of their joint farming. Moreover, experience shows that in many instances the formation of societies by members of these other categories is motivated primarily by the desire either to escape some legal imposition, restriction or disability through joining such society or to obtain financial advantage through concessions or aid given by gov rnment in relation to it. It is imperative to frame the official programme in such a way as to give the least scope for such opportunities. The scheme of concessions and aid should, therefore, be framed specifically in relation to the needs only of cooperative farming societies of uneconomic holders. At the same time, formation of joint farming societies of economic and larger holders need not be discouraged.

We now proceed to make our recommendations:—

12.8. *Leadership*—A programme of cooperative activity can grow as a mass movement only to the extent to which it draws upon the support and guidance of non-official public leaders. There can be no doubt that the formation of cooperative farming societies has been entirely voluntary. Nevertheless, the programme in this connection continues to be officially initiated and guided to a large extent. However, where it has succeeded, the results were achieved chiefly because of non-official leadership which was enthusiastically supported by the officials.

12.9. In view of this, it is imperative that non-official leadership should take an increasingly active interest in this programme. We would refer, particularly, to non-official leaders of the cooperative movement itself, leaders of political parties believing in the efficacy of the programme, and to members of panchayati raj, institutions and constructive social organisations. Support of all these is essential in order to create widespread understanding of the raison d'etre of the programme of cooperative farming and to dispel the doubts arising from hostile propaganda which has not hitherto been countered effectively.

12.10. It is our opinion that, in this work, the cooperative leadership of the country must accept its primary responsibility. It should encourage and sustain the programme, so that by the results achieved and by its own example, it can educate and influence the other leaders of opinion towards a fuller understanding of the possibilities of this programme. In particular, we would suggest that the National Cooperative Union of India, as the federal organisation at the national level, should crystalize non-official cooperative opinion for this purpose and formulate a programme of action in consultation with the State Cooperative Unions. We should also suggest for the consideration of the National and State Cooperative Unions, that they constitute standing committees to review the progress of such a programme once formulated.

12.11. The need for mutual support amongst cooperative institutions cannot be over-emphasized. We have observed, earlier, that where the district level leaders of cooperative institutions such as the central bank, the sale and purchase union etc., have come forward to assist cooperative farming societies, they have added greatly to the strength and development of the programme. We shall, later in these recommendations, mention details of the manner in which such cooperative institutions can assist the programme. Here, we should like to state that it is extremely important that these institutions direct their attention to the needs of cooperative farming societies. This is particularly so as these societies generally draw their membership from the weaker sections of the community. We understand that the Maharashtra State Apex Cooperative Bank has constituted a separate cell for looking after the problems of the weaker sections. It has also announced that it will share the losses that might be incured by the central cooperative banks which undertake, on a pilot project basis, to finance schemes such as cooperative farming, forest and other labour cooperatives, that benefit the weaker sections. We commend such an approach to the Apex Banks of the other states.

12.12. In the coming years, we feel that panchayati raj institutions will have an increasingly important role to play in the massive effort required for rural development. Such an effort will succeed only in the measure in which it draws upon the active participation of local people. One essential aspect of rural development is the provision of wider opportunities for the weaker sections. Basically, the problems of the weaker sections are those of economic rehabilitation and development. Rehabilitation will be possible only when development plans of the countryside are oriented, specifically to the needs of the weaker sections. We feel that the Zila Parishads and panchayat samitis, who will play a large part in the preparation and implementation of such schemes of rural economic development should pay particular attention to problems of rehabilitation. It is, therefore, of the greatest importance that the leaders of such institutions are closely associated with the programme of cooperative farming. We have observed that in areas where the zila parishads and panchayat samities have taken steps to promote cooperative farming, and resolve the difficulties faced, the results have been encouraging. Where these institutions have been indifferent, it has been more difficult for the programme to develop. We would, therefore, suggest that every effort should be made to associate the members of these institutions with this programme, so that its requirements are discussed regularly in meetings of the zila parishads and panchayat samitis.

12.13. Similarly, the programme needs to draw upon assistance from constructive social organisations. Where societies have been formed primarily by landless cultivators, the need for selfless social workers, devoted to the interest of the landless members, is particularly great. Efforts should be made in such areas not only to associate the workers of such organisations in the work of promation, but also, later, with the day to day working of the societies. In our view, the main functions of such social workers would be the creation, encouragement and education of leadership in the area and in the categories of persons for which the society has been established. The social worker should be the guide and adviser, who contributes to the smooth and efficient working of the society by his moral influence and persuasion, rather than by the authority and powers conferred upon him under the rules or act or bye-laws of the cooperative society.

12.14. The case-studies indicate that the cooperative farming programme, in certain areas, is beginning to create its own leadership. Where a cluster of societies has come into existence it is necessary to make the movement increasingly self-reliant and self-regulatory. In our opinion, the formation of federations at various levels would both strengthen the programme and render more effective its leadership.

These federations would not only mobilize public opinion in favour of the programme, but would also serve to dissemminate knowledge of techniques of management and operation. Technical guidance and member-education could also be effectively provided through such federations. We understand that the Central and State Governments are already considering the formation of district-level federations in areas where about 50 societies have been formed and state-level federations in states where about 250 societies have been organised. We endorse this approach and would like to emphasise that the organisation of such federations is important. In addition, wherever they are formed, they should be adequately assisted. We shall, later in these recommendation suggest the manner and extent to which this assistance should be provided. As the programme gathers momentum, and as the number of district and state level federations increase, the need will be felt for a national federation of cooperative farming societies. In our view, such a federation should be necessary by the last year of the Fourth Plan.

12.15. *Membership*—The case-studies indicate that examples of successful cooperative farming societies, as also unsuccessful ones, exist in each of the types described earlier. Generally, where the membership was homogenous, and shared a common approach, the societies worked with a greater degree of harmony and understanding. Where disparities amongst members were wide, it was more difficult to balance the interests of the big and the small. However, the proper functioning of societies was determined, first, by the motivation of members at the time of their joining together and, then by their subsequent capacity to adjust their individual interests. We would not, therefore, suggest confining the programme to any single type of society. Variations in local conditions, traditions of land management, and the availability of technical guidance may determine the kinds of societies which will work properly in a given area.

12.16. At the same time, it is necessary to be clear regarding our priorities, and to focus our attention, first of all, upon those who require the benefits of cooperative activity most. In this perspective, it is evident that efforts should continue to be made, primarily, to promote cooperative farming societies of small and medium cultivators. Amongst the societies of this type, however, various problems arise either owing to the lack of managerial talent and resources or the narrow land base on which the societies have to operate.

12.17. Where societies are formed with a heterogenous membership, it is of the utmost importance to limit the interest and returns of the bigger members. This can be achieved by following a system of distributing income in which the interest of members who participate in farm operations is fully safeguarded.

12.18. The case-studies, particularly those of Maharashtra and Punjab, draw attention to the need for re-considering the unit of membership. In Maharashtra, the cooperative law prescribes that the minimum membership required for the registration of a society must be drawn from distinct and independent families. The term 'family' is also comprehensively defined. Experience of the field, however, shows that in many areas the trend has been for groups, or households, related by caste and kinship, to join together. This resulted, in part, from a greater degree of mutual understanding amongst such persons and, in part, from the proximity of their holdings, which through the years had been increasingly sub-divided and fragmented. It was obviously very convenient for such cultivators to join together.

12.19. The question for consideration is whether in counting the number of separate units required for the formation of a society, we should insist on the individual family as the unit of membership or whether the household or the individual cultivating unit should be considered as the unit.

12.20. Whilst it is clear that a cooperative farming society should not subserve the interest of a restricted group of families, to the detriment of that of other members, there appear obvious advantages in drawing members from a similar background, who face similar problems. The danger in such societies is two-fold. Such societies may be formed to avoid tenancy and ceilings legislation and, in certain cases, the members of the dominant family, or families, may deliberately try to exclude others from membership, even though their farms are conveniently situated or they had continuously worked on the individual farms included in the society.

12.21. The case studies indicate that a number of societies formed even by a few families of medium and small farmers have worked well. There the members have lived in independent households and maintained separate cultivating units, we would not insist on a comprehensively defined family as the unit of membership. At the same time, we would recommend two important reservations as a safeguard against abuse. Firstly, under no circumstances should minors and non-working persons be enrolled merely to fulfil the minimum numerical requirements of registration. Secondly, the number of independent land owning households, cultivating their units separately, should, at least, be the minimum prescribed for the registration of a society. In addition, it is absolutely essential to ensure that attached and landless labourers who regularly work on the farm are enrolled to full membership of the society. The practice in Madras where landless members qualify only for non-voting 'B' class membership, goes contrary to the very basis of cooperative activity. We understand that the state Government has recently agreed to the discontinuance of this practice.

12.22. The study of the programme also raises the question as to the percentage of the members who should actually work on the farm. Experience indicates that where member-participation in farm operations was high, the societies worked with a greater degree of harmony; where there were a large number of absentee or non-working members or where more members than necessary devoted their time only to supervisory functions, tensions arose between those who participated in farm operations, and those who did not. The case-studies support the view that the bulk of members should work on the farm. We would, therefore, not suggest any change in the present rule that the number of absentees and non-working members, taken as a group, should not exceed 25 per cent of the total membership. In this connection, a working member should be considered as one who obtains the major part of his employment on the farm or other activities of the society. Those who engage in farm operations only for a few days, by way of a ritual should not be considered working members. The case-studies indicate that members who supervise the work also have an important role to play. As such, they, too, should be considered working members, however, this is subject to the reservation that they supervise the work for the major part of the year, and that the number of members engaged in supervision is not larger than that strictly required for the organisation and conduct of the activities.

12.23. *Viability of the Farm*—With the imposition of ceilings on land holdings, inequalities in the land owning status of cultivators are being reduced. In addition, the continuous process of sub-division is tending to reduce the size of individual cultivating units. In the case of cooperative farming societies organised by small land owners, the land base on which the societies operated is frequently very narrow. Amongst societies of other types, too, the land man ratio is likely to diminish increasingly with the passage of time. It is, therefore, necessary that cooperative farming societies operate on a wider and more diversified economic base. This will imply not only a more intensive use of the existing land resource, through suitable changes in cropping patterns, techniques of cultivation, and land improvement measures, but, in addition, the increasing creation of employment opportunities for members in agro-industries and other allied activities.

12.24. The case-studies show that, in certain areas, the societies organised proved to be non-viable. This was generally so for three main reasons: (i) societies were formed in which only a part of the holdings of members had been pooled; (ii) the lands, pooled in the societies were so fragmented and scattered that it rendered their use uneconomic and (iii) the individual holdings of the members were so small, that, even as an aggregate, they fell short of the minimum size required for viability. In certain cases, such societies were registered even though they fell below the minimum size prescribed by the State Governments.

12.25. In the working of societies, the partial pooling of lands led to many complications, not the least of which resulted from the attention of members being divided. The case-studies illustrate that, except in Sambalpur (Orissa), partial pooling almost invariably implied the pooling of inferior lands. They also make clear that, as a permanent arrangement, partial pooling does not permit the smooth functioning of societies. It is therefore necessary to emphasize that, before the registration of a society, members should fully understand the implications of joining together and, in every case, the effort should be to pool fully the lands of members or to have a definite programme of total pooling by stages within a reasonable time. However, as an exception, in a state like Kerala, where the holdings of members are often scattered over a wide area, and the local terrain makes their complete pooling difficult, the society may decide which plots should be pooled.

If, for any reason, the society after registration feels that it is not economic or worthwhile for it to operate or manage a particular tract of land belonging to a member within the general pool, it may make other suitable arrangements for its management. It is necessary, in this context, to point out that all the pooled lands with a society have not to be managed in the same way or to be administered by one set of persons. The society is the "firm" which controls many pieces of land

and other assets. All the major decisions regarding these connected with risk bearing, investment and production will be taken by the society; but it may for greater convenience of management split its total business into a number of plants. For reasons of location or of specific characteristics of an activity, the society may entrust management of a particular activity or area of land to a member or a group of members. But such special arrangement is not to be confused with partial pooling, as in this case the ultimate directing authority and the bearing of risks in respect of such land or activity is that of the society.

12.26. We recommend that, in areas where partial pooling has taken place, corrective measures should be taken without delay to pool the remaining land of members. Societies formed for the development of a particular tract of land, which forms merely a portion of the land owned by members in the area of operation of society, should not be encouraged unless members also take a firm decision to pool their remaining land. The actual process of pooling may, however, be phased in a manner which the society, as the firm, considers most appropriate.

12.27. In areas where the holdings of members are scattered, the study of the programme draws attention to the need for consolidation of land holdings. A number of societies were unable to give a good account of themselves owning to the numerous fragments in which their lands were scattered. In one case, the society held as many as 49 fragments. As a result, the movement of bullocks, implements, etc. was not only time-consuming and wasteful, but proper supervision and assessment of work became impossible. In the formation of societies hereafter, greater attention needs to be devoted to this aspect of organisation, and efforts made to ensure that members are drawn, as far as possible from amongst those whose lands can be pooled into a reasonable number of conveniently located and viable blocks.

12.28. It is necessary to mention, at this stage, that in a number of states, like Madras, Andhra Pradesh, Mysore and Kerala, consolidation of land holdings legislation has either not been enacted, or its implementation is yet to commence. In certain other states, consolidation of land holdings operations have either been stayed, or the pace of their progress is very slow. In each of these states, the societies organised have had to face the obvious disadvantages arising out of the situation. Whilst it is highly desirable that consolidation of land holdings proceedings should precede or accompany the organisation of societies, the organisation of societies even under existing conditions, leads to a measure of consolidation and represents an improvement on prevailing conditions. Further, in areas where consolidation of land holdings operations are being conducted, it is necessary to recognise the cooperative farming society as a single unit for purposes of consolidation. This is essential; existing consolidation laws generally make no provision in this regard, with the result that during consolidation operations, the plots pooled in a society have sometimes been rendered discontiguous.

12.29. The desirable size of a cooperative farm depends upon a number of factors. The State Governments were advised to prescribe the minimum size of a farm that could be considered viable in different parts of the country. These minimum sizes were decided upon after taking into consideration the nature of the land available, the average size of holdings in the area etc. By and large, the standards prescribed have been along the right lines. It appears that in certain areas, the societies formed were smaller than the sizes prescribed. It is clear that the formation of such societies should be discouraged.

12.30. *Employment and Agro-Industries*—We have pointed out in our assessment of the programme, that the capacity of cooperative farming societies to step up employment has increased with the undertaking of land improvement measures and capital works, greater intensity of cultivation, the undertaking of allied activities like dairying and sheep rearing and the development of non-farm occupations. We cannot over-emphasise the need for such activities. This is particularly so in view of the fact that most of the societies formed had to operate on a narrow land base. It appears to us that the necessity for such activities has not been as fully, appreciated as it should have been.

12.31. We would suggest that, in respect of each society that is formed, a long term plan of development should be formulated.

This plan should specifically provide not only for land development but also for a programme of increasing employment to members and their families. It should take into consideration the existing skills and efficiency of the members and seek to improve them by suitable training etc., wherever necessary. The programmes of employment should be so phased that members and their families derive the maximum benefit from them. In certain circumstances, it may even be necessary for the society to help its members in obtaining work outside the farm, as in a labour contract society.

12.32. In order to ensure that the societies operate on a wider economic base, it is necessary that programmes of agro-industries form an integral part of the activities undertaken by them. In particular, activities like dairying, piggery, poultry keeping, sheep rearing, pisciculture and horticulture should be introduced in the light of local conditions. In addition, cottage and village industries might also be introduced. However, in the preparation of such schemes, the greatest care should be taken to ensure that technical guidance and adequate resources are available. In addition, the schemes formulated should be economically viable. This is being stressed because in certain cases, past experience indicates that insufficient attention was paid to these factors. It would also be of advantage, wherever possible, to integrate the schemes undertaken by cooperative farming societies with the other schemes of agro-industries being taken up in the area. For instance, where milk unions are operating, dairying could be encouraged, as an infrastructure would be available for the development of this activity. Similarly, where a poultry scheme is in operation it would be of advantage if cooperative farming societies are also associated with it.

12.33. *Return for ownership and Distribution of Income*—We have referred in part II to the various practices followed by societies in different areas in regard to the payment of a return for land pooled. No uniform or rigid pattern can be suggested for the country as a whole, as the limits prescribed in the tenancy laws of the States regarding the quantum of return for ownership vary. We would suggest that in no case should the return for ownership exceed the limits prescribed under the tenancy legislation of that State. We would further suggest that in any particular society the income obtained for land should not be larger than the total rent obtained on the eve of the formation of the society, *i.e.*, the return for ownership of land should be frozen at this initial level, in the same manner as rents have been frozen under rental and tenancy laws.

12.34. In this connection we would recommend the following approach in relation to such accounting. Apart from the cost of material and other inputs purchased from outside, costs have to be debited in relation to land owned by members and work put in by them. These should be calculated for land, at the frozen level suggested by us above and, for labour, at normal current market rates. In all societies whose working is satisfactory, costs calculated at this level would reveal a surplus. The problems of distribution of this surplus is always difficult and has to be dealt with in detail for each particular society. We would, however, emphasize that in such distribution full regard be paid to basic cooperative principles. These indicate that the larger part of the surplus should accrue to members in relation to the extent to which they actively participate in the operations of the society and contribute towards them by a personal effort. Relatively low priority is given in this matter to the contribution of capital assets. While, therefore, not suggesting that no part of the surplus should accrue in relation to land ownership, we definitely recommend that the bulk of it should be paid as bonus for members' work.

12.35. It is essential that the staff responsible for the administration and supervision of the programme, and the district federations, wherever they come into existence, should pay special attention to this aspect of the programme.

12.36. *Farm Management and Accounting*—Little experience is available in accounting and budgeting of cooperative farms. Similarly, aspects of management like the formulation of work norms, providing of incentives, distribution of work etc., require scientific study. In addition, the nature of investment and returns most suitable for cooperative farming societies need to be carefully examined. As these are complex issues, which the members of societies are generally unable to solve by themselves, it is essential that guidance on these points should be provided to them. We would suggest that such a service may be provided by the National Cooperative College and Research Institute, Poona, which should set up a well-equipped unit for this purpose. Such a unit could also impart training to the key personnel engaged in this programme.

12.37. The case studies indicate that, generally, the societies experienced difficulty in maintaining their accounts properly and in keeping a systematic record of farm business. At the same time, in certain areas, the records which they were expected to maintain were too elaborate. It is, therefore, necessary to rationalise the procedures being followed and evolve a suitable method of farm accounting. This will imply, firstly, simplifying the records to be maintained, and secondly, relating these records more directly to the purpose of accounting, namely more efficient farm management.

12.38. Although the State Governments have prescribed certain registers and procedures for record keeping, largely on the basis of the recommendations made by the Working Group on Cooperative

Farming, the existing position needs to be carefully examined as the records available in most of the societies were far from satisfactory. We would, therefore, suggest that a small technical group should formulate simple but scientific methods for the maintenance of records and should go into the details of the records to be kept.

12.40. In the arrangements made for the training of secretaries, secretaries of societies, as also their office bearers and members, is of importance to the programme.

12.40. In the arrangements made for the training of secretaries, greater emphasis needs to be given, in the existing 6 month course, to Job-training in accounts and farm management. In addition, special efforts should be made to develop a knowledge of improved agricultural practices and skills in allied activities.

12.41. Where the secretaries of societies have adequate agricultural experience, short-term training courses of 4 to 6 weeks may be organised. In these, the primary emphasis should be on accounts and farm management. We understand that the syllabi for such training courses are being examined by a sub-committee of Principals of Cooperative Farming Training Wings.

12.42. It is necessary that education of members and potential members should be taken up on an extensive scale. Whilst the cooperative farming training wings may continue to organise village camps, the main responsibility for member-education should devolve on the National and State Cooperative Unions and the federations of cooperative farming societies. We recommend that these organisations should be involved more fully in the member-education programme. Government should, however, make available the necessary financial assistance to them for carrying out this work. We understand that the National Cooperative Union of India, in collaboration with the State Cooperative Unions, conducted a special orientation course in cooperative farming for its educational instructors incharge of member-education.

12.43. In addition, we would suggest that short-duration courses should be organised regularly for block and other staff responsible for technical guidance.

12.44. Hitherto, no adequate arrangements have been made for the training of key personnel engaged in this programme. As their orientation is essential, a beginning should be made in this direction. As indicated earlier, the National Cooperative College and Research Institute, Poona, could be equipped to organise such training in appropriate courses.

12.45. Apart from the programmes of training and education, a vigorous drive should be undertaken to educate public opinion about cooperative farming. We recommend that suitable measures should be formulated and undertaken by the Government and the National and State Cooperative Unions.

12.46. *Financial Assistance*—The provision of timely and adequate finance to cooperative farming societies, as to individual cultivators, is an essential condition for their successful working. The resources of a society consisting mainly of small and medium cultivators is seldom adequate to its needs and, invariably, it requires to draw upon external assistance. The Government of India, therefore, evolved a pattern of financial assistance, which, for each society, was as follows:

	Rs.
(i) Share capital contribution by Government ...	2,000
(ii) Medium and long term loans for land development	4,000
(iii) Loan and subsidy for construction of a godown-*cum*-cattle shed	5,000
(iv) Managerial assistance	1,200

12.47. These funds, provided from the budget of the Cooperative Department, were to serve as a nucleus. In addition, instructions were issued that funds available in other developmental departments should also flow to these societies, according to the patterns evolved for the various schemes. The Central Cooperative Banks were also to provide production finance. In order to encourage the Central Cooperative Banks to participate in the programme, the contribution to their special bad debt reserves was raised from 1 per cent to 2 per cent of the additional loans advanced to cooperative farming societies.

12.48. In spite of the instructions issued by the concerned Ministries of the Central Government, funds from the various developmental departments and the block budget did not reach cooperative farming societies in adequate measure. The societies had, therefore, to depend chiefly upon the funds provided in the cooperative budget.

12.49. The case studies clearly indicate the inadequacy of the existing arrangements for financial assistance and point to the need for a change in the present approach. A rigid pattern of assistance, unrelated to the size of the farm, the resources of members and the specific projects of development undertaken, has proved unsuitable. In certain cases, it had led to the splitting of societies. In many other cases, the societies have been unable to make the improvements planned, owing to a lack of resources.

12.50. Here, we would like to emphasise that each society formed has unique problems. We have earlier stressed that, for each society, a clear long term plan of development should be formulated. To be meaningful, financial assistance should be related to such a plan of development and the resources of the members. It should take into consideration the requirements of the society in their totality. The total requirements may be analyzed in the following manner: a society, particularly of small holders, would require assistance in the initial stages for promoting it and for establishing operations. These will have to be obtained from outside, *i.e.* in the form of assistance both grant and loans from Government. An established society will require finances for development and current production, and other business needs. In so far as individual member-families have no assets or sources of income left with themselves, the society will also have to provide for their financial requirements. All such requirements should be available in the normal manner from the appropriate cooperative institutions. It happens that the rules and procedures of these institutions do not specifically provide for the financing of cooperative farming societies or their members. We make recommendations regarding how the present position can be improved. We have referred, a number of times to the need for diversification of activities of farming societies. There are a number of specialised agencies which look after financing of particular activities appropriate to farming societies. It must be ensured that assistance from all such agencies flows to cooperative farming societies speedily and appropriately.

12.51. Our recommendations in respect of financial assistance must, therefore, be viewed in an integrated manner. For facility of analysis, however, they are being dealt with under three broad heads:

(i) assistance under the Cooperative Plan;
(ii) assistance from various development departments, the block and the Khadi and Village Industries Commission; and
(iii) assistance from the cooperative financing agencies.

12.52. (i) *Assistance under the Cooperative Plan*—Here we may consider, first, the requirements of joint farming societies and, second, the needs of collective farming societies.

12.53. In regard to joint farming societies, our studies indicate that the major difficulty arose from the shortage of finance for land development. The flat rate of Rs. 4,000 per society, under the existing pattern of assistance, worked out to an average of about Rs. 40 per acre and proved to be inadequate. This was inspite of the fact that a further diversion was permitted, in certain cases, of the loan component of the provision made for the construction of the godown-*cum*-cattleshed. This amounted to a further Rs. 3,750. In order to meet the requirements of societies more fully, in the light of available experience, we suggest that the amount of land development loan should be related to the size of the farm and the programme formulated. In our view, this assistance may be provided at an average rate of Rs. 100 per acre, subject to a ceiling of Rs. 20,000 per society.

12.54. No change appears necessary in the existing scale of assistance in regard to the quantum of share capital participation by Government, the extent of managerial subsidy and the amount of loan and subsidy for the construction of the godown-*cum*-cattleshed.

12.55. As regards the godown-*cum*-cattleshed, experience shows that many of the joint farming societies did not construct them. This was because the cattle were either not pooled, or alternative arrangements existed for the storing of produce and production requisites. Some of the societies also took the view that investment on this item, in the initial stages, might increase their liabilities without a corresponding increase in production. In view of this, we recommend that the assistance for the godown-*cum*-cattleshed, should be given only after an examination of the needs of each society. For purposes of an overall allocation of funds, however, provision might be made for 25 per cent of the joint farming societies formed.

12.56. Our proposals regarding assistance to the collective farming societies are as follows:

(a) *Loans for land development*—Both in respect of overall requirements, and investment per acre, the needs of collective farming societies are greater than those of joint farming societies. We, therefore, suggest that assistance to them for this purpose should be determined at an average of

Rs. 150 per acre, subject to a ceiling of Rs. 30,000 for a society;

(b) *Managerial assistance*—As these societies are generally in greater need of technical and managerial guidance and it is difficult to secure persons with adequate experience and knowledge from amongst the members themselves, it becomes necessary in many cases, to draw managers having the desirable qualifications from outside. Furthermore, the capacity of such societies to meet the costs of management, are, in the initial stages, severely restricted. This is so as the levels of production, from the inferior soils generally allotted, remain low for some time. It therefore appears necessary to raise the managerial subsidy in respect of collective farming societies from the present level of Rs. 1,200, spread over a period of 3—5 years, to Rs. 2,100, spread over a similar period.

(c) *Share-capital contribution*—Difficulty is also experienced by members of collective farming societies in raising share capital on a matching basis. We suggest that the government contribution to share capital may be related to the capital subscribed by the members. Subscribed capital may be collected from the members in instalments, and the government contribution made as soon as the members have collected and paid 1/10th of the subscribed capital.

(d) *Cattleshed-cum-godown*—Experience shows that in most of the collective farming societies, there is immediate need for the construction of a cattleshed-*cum*-godown. In respect of them, therefore, overall provision, at the current rate, should be made on the calculation that about 80 per cent of such societies will require a building soon after they are allotted land.

For purposes of planning and making available resources to the States, the outlay for the programme may be calculated in the manner indicated in our recommendations given above. The State Governments should, thereafter, assess the requirements of individual cooperative farming societies and provide resources to them along the lines suggested in these recommendations.

12.57. (ii) *Assistance from other development departments*—It has been emphasized repeatedly by the Central Government, since the programme was initiated, that the various developmental departments in the States should, as a matter of priority, make available resources to cooperate farming societies from out of the funds available under different schemes. To this end, it was also suggested that the rules and procedures governing the schemes, should be suitably amended to take into consideration the requirements of cooperative farming societies. In particular, it was emphasised that a cooperative farming society should be treated as a single entity for purposes of financial and other assistance and that its members should not have to apply individually for such assistance. The case studies illustrate that, as yet, the resources from the various departments have not flowed in the manner that was considered essential. In certain states, in respect of the schemes of the various departments, cooperative farming societies were not being recognised as single units. It is unfortunate that such a situation has persisted and that this basic requirement for the growth of the programme has not been fulfilled. It will be necessary, therefore, to remedy the position without further delay and to intensify efforts to ensure that the resources of the developmental departments are made available increasingly.

12.58. In this connection, we would refer to, and commend, the steps taken by Maharashtra Government. Seeing that the resources under the Cooperative Plan was inadequate and funds were not available from the land mortgage banks, the State Government issued comprehensive instructions regarding the deployment of resources from the Agriculture and Rural Development Department. A coordinated view was taken at the state level of the overall requirement of cooperative farming societies. Thereafter, funds were allocated from out of the departmental resources for soil conservation, construction of community wells, etc. In this manner, in the financial year 1965-66, Maharashtra Government earmarked a provision of nearly Rs. 38 lakhs for programme to be undertaken on the lands of cooperative farming societies.

12.59. We recommend that, in other States as well, a similar approach should be adopted, so that in as short a time as possible, a phased programme may be drawn up to meet the requirements of cooperative farming societies.

12.60. This is particularly necessary if the cooperative farming societies are to undertake agro-industries. The need for such activities has already been emphasized. For the Fourth Plan, The Central Government have issued instructions that out of the provision for programmes relating to dairying, poultry and piggery, 75 per cent of the overall resources should be earmarked for the cooperative sector. We suggest that out of this, a further earmarking of resources should take place in each State, to see that the requirements of cooperative farming societies are fully met and an integrated approach adopted for the formulation of schemes, providing of technical guidance etc.

12.61. The Khadi and Village Industries Commission, also has an important role to play in encouraging cooperative farming societies to undertake appropriate subsidiary activities. The case studies illustrate that in certain areas, like Durg district (Madhya Pradesh), and Savarkundla block (Gujarat), the Khadi and Village Industries Commission provided resources and training facilities to members in a significant manner. In other areas, however, difficulties were encountered in obtaining such assistance. It is necessary that the Khadi and Village Industries Commission reviews the existing procedures and takes measures to ensure that the benefits which it has been able to provide in some places are more widely spread in the future; in certain areas, where a large number of societies have been formed, it should be possible for it to intensify its activities.

12.62. (iii) *Assistance from Cooperative Financing Agencies*—The case-studies indicate that in districts like Dhulia (Maharashtra), Sambalpur (Orissa) and Durg (Madhya Pradesh) because of the active support and sympathetic attitude of the central cooperative banks, particularly in providing production finance, it was possible for cooperative farming societies to execute their production programmes. The growth of a large number of societies in these areas also resulted from the fact that the assistance available in this manner gave their members strength and confidence in formulating and implementing their production schemes. Apart from some exceptions, however, the central cooperative banks have, by and large, not been able to provide the necessary financial assistance. Some of them refused to provide assistance, despite a government guarantee. As a consequence, the growth of the movement was hindered very considerably.

12.63. It has been observed that where central cooperative banks have provided finance to cooperative farming societies, and a suitable link was established with marketing, the cooperative farming societies justified the loans advanced to them through better production and prompt repayment. It was also found that the banks were able to enforce repayments from cooperative farming societies at least as effectively, or, in some cases, more effectively, than in respect of individual cultivators in the area.

12.64. Although the providing of short-term credit will itself be a a big step forward in many areas and the central cooperative banks should direct their attention to this immediately, this alone will not be enough. It is equally important that cooperative farming societies find resources for their long and medium term purposes.

12.65. As far as the land mortgage banks are concerned, this will mean, in many cases, amending of the bylaws of the primary land mortgage banks in order to enroll cooperative farming societies as members. In other cases, it might mean clarifying the liability of members in respect of the repayment of such loans even in the event of the society ceasing to exist after the period of pooling is over. We feel that difficulties of this nature should not arise if the practices suggested by the Maharashtra apex land mortgage bank are adopted. The Maharashtra suggestions are:—

(i) loans should be granted to a cooperative farming society on the mortgage of lands owned exclusively by the cooperative farming society, or those belonging to the members, who have by power of authorisation transferred the lands for joint cultivation to the cooperative farming society by regular power of attorney and authorised the society to raise loans from land development banks;

(ii) the power of attorney, among other things should contain a definite undertaking from a member that his lands, which have been mortgaged by the farming society to the land mortgage bank, would continue to remain in mortgage with the bank so long as the loan is not repaid, irrespective of whether he ceases to be a member, or the period of pooling of land terminates;

(iii) the power of authorisation should contain a clause that a member would not transfer the lands till the loan of the land mortgage bank is paid in full.

12.66. The case studies indicate that the members of a society sometimes require loans, over a short period, for current consumption purposes, and, over a longer period, for ceremonial expenses, various contingencies and the repayment of old debts. In so far as the loans for current consumption are concerned, we recommend that the practice followed in IADP areas, in respect of individual cultivators should be adopted to meet the needs of members of cooperative farming societies as well. In IADP districts, the service cooperatives have been advised to adopt a practice of issuing loans upto a limit of Rs. 50 per member for consumption purposes. This amount forms part of the production programme against which the loans are advanced and comes within the overall credit limit of the borrower. In our view, while fixing the credit limit of farming societies, the Central Cooperative Bank should take a similar view in respect of the requirements of the society. In addition, the society may itself assist its members in meeting their current consumption requirements by offering advances which may be adjusted against wage payments or by spacing the payment of wages in a mnaner that suits its members' needs.

12.67. As regards the requirements of individual members for loans repayable over a longer period, the case studies point to the complexity of the problem and the many difficulties which arise. A number of societies in Maharashtra, particularly in Dhulia district, were compelled to issue loans to some members to meet such obligations arising from the period before their lands were pooled in the society. In some cases, the members who joined the societies were unable to market their produce jointly. Instead, in order to honour their commitments, immediately after harvesting they took their individual shares of the produce and handed them over to their money-lenders. In many other cases, the desire of members to retain some land, which could be offered as a security in order to meet their responsibilities arising from old debts and other contingencies led to partial pooling. The magnitude of this problem does not lend itself to easy solution. As the members have pooled their land, it is evident that a method should be evolved to assist them in the repayment of old debts and the meeting of other ceremonial and contingent expenditure. As far as old debts are concerned, we would suggest that, at the time of admission of a member, the society should obtain a declaration of his debts. Where it is possible for the society to secure the scaling down of these debts, it should do so. After this has been done, the society should assist in discharging the debt. This may be done by advancing a loan to the indebted member against his return for ownership and remuneration for work. The loan may then be recovered in suitable instalments. If, at the time of admission, the debts declared are heavy and not easily repayable, it would be better if the society did not admit such a person to membership. A similar approach may be adopted by the society in assisting members who are faced with the need for loans in order to meet ceremonial and contingent expenses.

12.68. As the financing of cooperative farming societies is the legitimate function of the cooperative banking structure, it is necessary to work out the exact manner in which this programme can be assisted. At present, diverse securities are being required in different parts of the country for short, medium and long term loans. It is necessary to study the various practices and rationalize the procedures. In this, the apex cooperative banking institutions, at the state and national level, can provide guidance so that a clear and integrated approach is formulated for each area in respect of the various kinds of cooperative finance required by the societies. We would therefore, suggest that the National Federation of Apex Cooperative Banks may be requested to set up a small committee, in consultation with the All India Union of Land Mortgage Banks, to go into the details of this question. This should be done as a matter of priority.

12.69. *Technical Guidance*—Since the programme of organizing cooperative farming societies in pilot projects was undertaken in the Third Plan, attention has, from time to time, been drawn to the imperative need for providing sound and continuing technical guidance to the societies that are formed.

12.70. The role of the technical staff of the Block and various departments, in helping societies to formulate realistic production plans and schemes of mixed farming, village and cottage industries etc., has been stressed. In addition, the duties of the village level workers, and the special staff appointed under the cooperative farming programme, were also spelt out in detail.

12.71. Study, nevertheless, indicates that technical guidance has neither been adequate nor of the standard required in many areas. In certain areas, a wrong direction was given to the programme owing to a lack of understanding even amongst the officials appointed to guide it. As a result the societies formed either did not function properly, or developed on the wrong lines.

12.72. On the other hand, examples also exist of areas in which the right type of official helped immensely in the launching of the pilot programme and, later, in its subsequent development. Experience points to the need for careful selection of officials, at all levels, as this programme requires both technical and administrative guidance of a high order.

12.73. The overall position regarding the availability of staff in the different states has been surveyed in part I of this report. The data thrown up in the case studies regarding the quality of the staff appointed have been indicated in part II. Our suggestions regarding improvements in the arrangements for technical guidance, are given below.

12.74. At the State level, we endorse the earlier suggestions made by the Central Government that there should be one whole-time Joint Registrar or Deputy Registrar to look after this programme. In addition, in each State, he should be supported by an officer of the Agriculture Department. We have already emphasized that in States in which the number of societies is 250 or more, steps should be taken at the earliest to organise state-level federations. We understand that the Ministry of Community Development and Cooperation has already formulated a scheme for such federations. We endorse the suggestions contained in the scheme regarding the activities to be undertaken by these federations and the staffing arrangements required. In our view, the state-level federation should be financially assisted by Government in its initial period of 3—5 years. To be effective, such a federation would require a grant of about Rs. 40,000 in the first year, in the manner suggested in the scheme. In the succeeding years, this assistance may be provided on a tapering scale.

12.75. At the district level, the approach will have to vary according to the number of societies that have been formed. In areas such as Dhulia, Sambalpur etc., where a large number of societies have been organised, it would be desirable to provide technical guidance through a district federation. Such a federation may be provided with the whole-time services of an agriculture graduate. In Dhulia, where a district federation has already been formed, it has played an important part in promoting and guiding the programme. In 4 other districts of Maharashtra, federations have also been formed. In other areas where the number of societies is large, but federations are yet to come into existence, the problems of management and guidance have become more acute. We understand that the Ministry has formulated a scheme for district level federations and we endorse its approach. It is extremely important that action should be taken at the earliest to organize such institutions and financial assistance provided to them in a manner which makes it possible for them to function effectively. We would suggest that these federations be provided a grant to the extent of about Rs. 10,000 in the first year. Similar assistance, on a tapering scale, may be provided for another 2—4 years. In addition, where the district federation requires to set up a workshop or undertake other such activities, it may be provided with a loan of Rs. 10,000.

12.76. In certain cases, where, in a single district, an adequate number of societies does not exist to warrant the formation of a district federation, it might be possible and desirable to form a federation at the divisional level, for two or three contiguous districts.

12.77. As regards special staff at the project level, we would suggest, firstly, that there should be one worker of the rank of Inspector or Extension Officer (who should preferably have an agriculture degree). In addition, 1 VLW. should be provided for each group of 10 societies.

12.78. At present, there are no special staffing arrangements for societies that have been formed in non-pilot areas. It is, however, also necessary to guide their work. We would, therefore, suggest that in respect of non-pilot societies also, 1 VLW. may be posted for every 10 societies. The location of the VLW's headquarters may be determined in the light of local conditions.

12.79. The above suggestions are in respect of the special staff appointed for the programme. In addition, it must be ensured that the existing block staff, and the various technical officers of the district, should take a special interest in the cooperative farming programme. This would imply, at the block level, a revision in the job charts of the Extension Officers for Agriculture, Animal Husbandry, Industry, etc., so as to include a programme of regular visits to cooperative farming societies. The Block Development Officer should also be held firmly responsible for seeing that the societies formed are adequately guided and assisted. In respect of district level officers, it would mean clear instructions to ensure their association not only at the time of preparation of production plans, but on a continuing basis, so as to ensure the proper implementation of these plans.

12.80. The non-official leadership of Panchayati Raj bodies, like the Zila Parishads and Panchayat Samitis, should also be closely associated with the programme. It will assist the programme if the problems facing the societies could be periodically discussed in their meetings, with a view to resolving the difficulties.

12.81. *Allotment of Government Lands*—The programme of cooperative farming has immense scope on Government waste lands, surplus lands and lands reclaimed as a result of large irrigation projects. It is essential that Government itself sets an example by encouraging cooperative farming on lands under its control. Experience shows that, in such areas, where individual allotment has been tried, the small farmers of limited means have frequently been unable to derive adequate benefit from their lands. In many cases, they have either become indebted, or the control of their lands has passed into more powerful hands, or the process of sub-division and fragmentation has set in, defeating both the social and the economic purpose behind their resettlement.

12.82. Whilst the policy of Government of India on this issue has been indicated on a number of occasions, in actual fact, the implementation of this policy, excepting in a few States, has left much to be desired. Whilst it has been repeatedly emphasized that compact blocks of such lands should be allotted to cooperative farming societies formed of landless labourers, in certain States, not only has enormous delay occurred in making available such lands, but, even when they have been provided, allotments have been made on the basis of an annual lease. This has rendered impossible any permanent improvements in the land; in many cases, it has resulted in the societies facing a constant threat of eviction.

12.83. We would therefore reiterate that government lands, wherever available in compact blocks forming viable units, should be allotted to cooperative farming societies. In making such allotments, the priorities fixed by the State Governments in regard to the various categories of persons entitled to such land, should be followed. The allotments should be made without undue delay and the lands should be given on a permanent or long term basis. In addition, it should be ensured that the lands provided can be cultivated in an economic manner and adequate financial assistance made available for this purpose. Failing this, as has been seen in certain cases, the societies will face the problems of high costs and low returns.

12.84. Apart from the programme of cooperative farming on government waste lands there are certain other areas in which the programme should be undertaken. Where large tracts of land have been reclaimed, as by the Rajasthan Canal and Chambal project, a sizeable area should be earmarked for cooperative farming. It would be possible to plan and develop such areas on models of agro-industrial enterprise, in which the increasing population could be absorbed in a variety of productive activities allied and subsidiary to agriculture. Cooperative farming could also lead to a higher degree of economic productivity and larger marketable surpluses than if these lands are operated individually. Similarly in the area covered by the Tungabhadra Project, special efforts should be made to introduce cooperative farming. It has been seen that individual cultivators in the area have not been able to utilise adequately the irrigation resources created. We understand that the Ministry of Community Development and Cooperation has prepared special schemes for such areas. It is necessary that steps are taken early to implement these schemes.

In areas where resettlement of displaced persons is being undertaken, as in Dandakaranya, cooperative farming should be introduced.

We understand that though a scheme was formulated some years ago, no further steps have been taken actually to organise societies. Instead of transplanting and multiplying the disadvantages of traditional village economies to these areas, we feel a break through can be effected by the introduction of cooperative farming.

12.85. With the imposition of ceilings on the land holdings of private sugar factories in Maharashtra about 80,000 acres of land has come to vest in the State. The Maharashtra Ceilings legislation provides that such lands should be entrusted to cooperative farming societies for management. The Act also provides that the State Government may, for a period of 3 years (extendable by another 2 years), arrange for the cultivation of these lands through the organisation of State farms. Maharashtra Government has constituted a State Farming Corporation for this purpose. As the initial period of 3 years is drawing to a close, in respect of some of these lands, we would suggest that advance action be taken to prepare for the transition to cooperative farming. A beginning should be made without delay, as non-official cooperative leadership of a high order is available.

12.86. *Revitalisation*—We have mentioned earlier that some of the societies studied were not functioning along the lines expected of them. Some others were stagnant or in the process of disintegration. The working of these societies should be carefully examined and steps taken to put them on the right lines. Where it is not possible to improve them, the societies should be weeded out. The studies reveal that the weakness or failure of a society shakes the confidence of both members and non-members in cooperative farming. It also creates an adverse reaction in societies that are working well. In our view, therefore, this aspect of the programme deserves the closest attention.

12.87. The management of an economic organisation, in which a number of individuals having varied interests participate as partners, becomes a complex undertaking. It raises questions of human relations, incentives, and technical arrangements. In cooperative farming societies these issues become particularly important, as they involve the replacement of methods of work, which are familiar and time honoured, by those which are new and still in an experimental stage.

12.88. Cooperative farming societies, therefore, need careful nursing and guidance. Measures need to be taken to ensure that the benefits of joint management continue to flow over the years in an equitable and planned manner.

12.89. *Programme for the Fourth Plan*—Our survey and the case-studies reveal notable progress in respect of some pilot as well as non-pilot societies and, at the same time, considerable failures. The areas of success have been those in which there was a conjuncture of favourable circumstances. It is obvious that having discovered these areas special attention must be paid to conservation of results achieved and utilisation of the favourable climate for further planned progress. We have found that the crucial elements were non-official leadership, support of cooperative institutions and intelligent operation of governmental agencies. We feel that, in each state, it should be possible to find out other areas in which all these factors are present to some extent. We would recommend a programme of such purposeful selection of areas for initiating and establishing intensive programmes in the Fourth Five Year Plan. Finally, we would not recommend stoppage of a wider effort. Such effort, if conducted continuously with discrimination, is likely to yield at least some results in unexpected quarters. Moreover, the work of dissemination of ideology, to which we attach great importance, would be greatly assisted by such widespread effort.

12.90. We have pointed out in our report that it is necessary to focus our attention, first of all, upon those who require the benefits of cooperative activity most. In this perspective, it is evident that efforts should continue to be made, primarily, to organise cooperative farming societies of small and medium cultivators. This will require sustained and continuous effort. The present programme is in its infancy; it will take another 10—15 years before a significant impact is made on the country as a whole. We would like to emphasise that results should not be expected hastily and that there are no short-cuts to solving the problems of marginal and sub-marginal cultivators.

12.91. Our study indicates that most of the successful societies are yet in their initial stages of development and special efforts must be made to see that they make continuous unimpeded progress. The programme in relation to both the established successful areas and the potentially successful areas must be intensive. By this we mean that in these areas plans of organisation and development of each individual society must be drawn up separately, in detail, and financial assistance, technical guidance etc. must be adjusted to individual requirements as defined in the plans. If this is done, we have no doubt that the areas of success will multiply and, by the end of the Fourth Plan, it should not be difficult to have 20—25 such areas. In each of these, we envisage the formation of another 50—60 societies.

12.92. Besides this programme of intensive development, consolidation and reorganisation of the movement along the right lines should receive the utmost attention. At present, the programme is under way in about 300 pilot project areas. In addition to the reorganisation of those amongst the existing societies which are defective, it should be possible to organise a further 10—15 societies in the pilot projects already selected. Further, with purposeful selection the programme may be extended to contiguous blocks and other suitable areas, in each of which 10—15 societies could be formed over a period of 5 years.

12.93. The programme of cooperative farming has, in addition, immense scope on Government waste lands, surplus lands and lands reclaimed as a result of large irrigation projects. Here the growth of the programme will depend largely upon the initiative of government itself.

12.94. We feel that, in the Fourth Plan, given support and guidance in the manner outlined in this report, about 10,000 new cooperative farming societies should come into existence.

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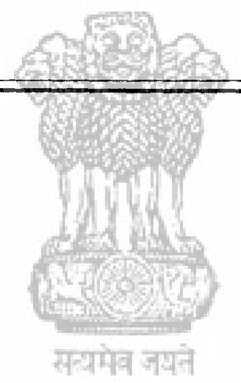
PART IV

SUMMARY OF RECOMMENDATIONS



CHAPTER XIII

SUMMARY OF RECOMMENDATIONS

S. No.	*Ref. to Para No.*	*Recommendations*
(1)	(2)	(3)
1.	12.1	The programme of cooperative farming is directed, in the main, towards the solution of problems presented by the class of small or "uneconomic" cultivators in the Indian economy. The number of families in the countryside in this class is very large and the area of cultivated land controlled by it is estimated at not less than 15 per cent of the total. Programmes as that of technical assistance and of cooperative credit and marketing find the greatest difficulty in serving this class effectively. The land surface controlled by them is, therefore, even less well-used than the average and the class suffers from a very high degree of under-employment. Cooperative joint farming by bringing together, under one management, lands held by a large number of uneconomic holders creates a land base on which technically efficient and economic operations become possible.
2.	12.2	Efficient management of pooled lands implies that the total input of labour on the cooperative joint farms, for the same types of productive enterprise, is less than that on scattered individual holdings of which they are composed. The development of pooled land resources will absorb some labour in the initial stages and if such development results in intensifying agricultural activity, there would be some permanent increase in the level of demand for labour on the cooperative joint farm. Sooner or later, cooperative joint farms even when they succeed in considerably improving the use of pooled lands, find agricultural activity insufficient to employ the pool of labour in the families composing the membership of the cooperative farming society.
3.	12.3	The pooling of lands affords an opportunity to the cooperative, the pooling of labour may be said to present it with a challenge. Though initially a joint cooperative farming society is directed mainly towards farming and agriculture, it must as a continuing organisation, be looked upon as a business which is set up with certain pooled resources and which is under compulsion to undertake diversified economic activities for the fuller utilisation of its pooled resources of labour.
4.	12.5	All the steps relating to cooperative farms have to be

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		considered in the context of the human problems. Such a society differs strikingly from most other types of cooperative activity. In a joint cooperative farming society, the household as a consumption unit alone remains separate; usually as a production unit it loses identity both as to activity and as to command over resources. Against the background of normal operations in a rural society of family farmers, this loss of initiative and independence is bound to be keenly felt and must create many complex problems, human and administrative. It would be possible to deal with these adequately only if the total performance of the joint cooperative farming society is outstandingly different from that of independent small holders and the standard of living and opportunities afforded by it to member families are demonstrably better than those enjoyed by independent small holders.
5.	12.6	The potentialities of this form of organisation to solve the problems of small farmers must be widely recognised and a sufficiently large number of groups of such farmers must be encouraged to form societies and must be carefully guided and assisted in the period of development. Non-official leadership and official technical and financial assistance must work together in this cause.
6.	12.7	Categories of farmers, other than small holders, may also form joint cooperative farming societies and these may achieve a much better utilisation of pooled resources through joint effort. However, the national programme of cooperative farming is not directed essentially towards these. This is because even as independent units they can achieve a minimum level of efficiency in the use of resources and take advantage of and participate in national programmes of development; and because specially strong efforts and strong motivation are needed to make a success of their joint farming. Moreover, experience shows that in many instances the formation of societies by members of other categories is wrongly motivated. Therefore it is imperative to frame the programme in such a way as to give the least scope for such opportunities. The scheme of concessions and aid should, therefore, be framed specifically in relation to the needs only of societies of uneconomic holders.
7.	12.9	It is imperative that non-official leadership should take an increasingly active interest in the programme. In particular, the support of non-official leaders of the cooperative movement itself, leaders of political parties believing in the efficacy of the programme, members of panchayati raj institutions

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		and constructive social organisations, is essential to create a widespread understanding of the raisen d'etre of the programme and to dispel the doubts arising from hostile propaganda which has not hitherto been countered effectively.
8.	12.10	In this, the cooperative leadership has a primary responsibility. It should encourage and sustain the programme, so that, by the results achieved and by its own example, it can educate and influence other leaders of opinion towards a fuller understanding of the possibilities of this programme. In particular, the National Cooperative Union of India should crystallise non-official cooperative opinion for this purpose and formulate a programme of action in consultation with the State Cooperative Unions. The National and State Cooperative Unions should constitute standing committees for this purpose.
9.	12.11	Other cooperative institutions like apex and central cooperative banks, marketing societies, etc., should lend full support and impart strength to the programme. The example of the Maharashtra Apex Cooperative Bank, which has constituted a separate cell for looking after the problems of the weaker sections, is commended to the Apex Banks of other states.
10.	12.12	Panchayati Raj institutions, which play an important role in the preparation and implementation of schemes of rural development should pay particular attention to this programme. Every effort should be made to associate the members of these institutions with the programme.
11.	12.13	The programme should also draw assistance from constructive social organisations. Leadership of such agencies is particularly valuable when societies are formed by landless labourers. In such cases, the association of such agencies should not only be promotional and educative, but active guidance and assistance should also be provided in the day to day working of the societies.
12.	12.14	In certain areas, the programme of cooperative farming has begun to create its own leadership. For the growth of such leadership, formation of federations of cooperative farming societies at the district and state levels is important. These federations would not only mobilise public opinion, but would also serve to disseminate knowledge of techniques of management and operation. As the programme gathers momentum and the number of district and state level federations increases, a national federation of farming societies may be formed. Such a federation should be necessary by the last year of the 4th Plan.

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13.	12.15 & 12.16	Attention should be focussed mainly, on farming societies among small and medium cultivators, as they require the benefits of cooperative activity most. However, the programme need not be confined to any single type of society.
14.	12.17	Where societies are formed with a heterogenous membership, it is of utmost importance to limit the interest and returns of bigger farmers, through a system of distributing income which fully safeguards the interest of members participating in farm operations.
15.	12.20	A cooperative farming society should not subserve the interest of a restricted group of families to the detriment of that of other members. However, there appears obvious advantages in drawing members from a similar background, who face similar problems. The danger in such societies is two-fold. They may either be formed to avoid tenancy and ceilings legislation, or, in certain cases, the members of the dominant family, or families, may deliberately exclude others from membership.
16.	12.21	Where the members have lived in independent households and maintained separate cultivating units, they may constitute the unit of membership even though they belong to one family, subject to two important safeguards. Firstly, under no circumstances, should minors and non-working persons be enrolled merely to fulfil the minimum numerical requirements of registration. Secondly, the number of independent landowning households, cultivating their units separately, should, at least, be the minimum prescribed for the registration of a society. In addition, it is absolutely essential to ensure that attached and landless labourers, who regularly work on the farm, are enrolled to full membership of the society.
17.	12.22	No change is necessary in the present rule that the number of absentees and non-working members, taken as a group, should not exceed 25 per cent of the total membership. In this connection, a working member should be considered as one who obtains the major part of his employment on the farm or other activities of the society. Those who engage in farm operations only for a few days, by way of a ritual, should not be considered as working members. Members engaged in supervisory functions should be considered as working members, subject to the condition that they supervise the work for the major part of the year and that the number of members engaged in supervision is not larger than that strictly required for the organisation and conduct of the activities.

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18.	12.23	In case of societies organised by small land owners, the land base on which the societies operate is frequently very narrow. It is, therefore, necessary that cooperative farming societies operate on a wider and more diversified economic base. This will imply not only a more intensive use of the existing land resource, through suitable changes in cropping patterns, techniques of cultivation and land improvement measures, but, in addition, the increasing creation of employment opportunities for members through agro-industries and other allied activities.
19.	12.25	Before the registration of a society, members should fully understand the implications of joining together and, in every case, the effort should be to pool fully the lands of members or to have a definite programme of total pooling by stages within a reasonable time. As an exception, however, in a State like Kerala, where the holdings of members are spread over a wide area and the local terrain makes their complete pooling difficult, the society may decide which plots should be pooled.
20.	12.25	If, for any reason, the society after registration feels that it is not economic or worthwhile for it to operate or manage a particular plot of land belonging to a member within the general pool, it may make other arrangements for its management. All the pooled lands with a society need not be managed in the same way or administered by one set of persons. The society is the "firm" which controls many pieces of land and other assets. All major decisions regarding those connected with risk bearing, investment and production will be taken by the society; but it may for greater convenience of management split its total business into a number of "plants". Such special arrangement is not to be confused with partial pooling, as in this case, the ultimate directing authority and the bearing of risks is that of the society.
21.	12.26	In societies where partial pooling has taken place, corrective measures should be applied without delay to pool the remaining land of the members. Societies formed for the development of a particular tract of land, which forms merely a portion of the land owned by members in the area of operation of the society, should not be encouraged unless members take a firm decision to pool their remaining land. The actual process of pooling, may, however, be phased in a manner which the society, as the firm, considers most appropriate.
22.	12.27	Where the holdings of members are scattered, efforts should be made to ensure that members are drawn, as far as possible, from amongst those whose lands can

(1)	(2)	(3)
		be pooled into a reasonable number of conveniently located and viable plots.
23.	12.28	It is desirable that consolidation of holdings should precede or accompany the organisation of societies. However, the organisation of societies even under existing conditions leads to a measure of consolidation and represents an improvement on prevailing conditions.
24.		In areas where consolidation of land holdings proceedings are being conducted, the cooperative farming society should be recognised as a 'single unit' for purposes of consolidation. Where the existing consolidation laws do not provide for this, they should be suitably amended.
25.	12.29	The desirable size of a cooperative farm depends upon a number of factors; by and large the standards prescribed by the State Governments have been along right lines. In certain areas the societies below the prescribed minimum size were organised. Formation of such societies should be discouraged.
26.	12.30 to 12.32	The capacity of the societies to step up employment increases with the undertaking of land improvement measures and capital works, greater intensity of cultivation and by undertaking allied activities like dairying and sheep rearing, and the development of non-farm occupations. The importance of these activities should be fully recognised. In respect of each society that is formed, a long-term plan of development should be formulated. This plan should specifically provide not only for land development but also for a programme of increasing employment to members and their families.
27.		For societies to work on a wider economic base, programmes of agro-industries should be considered as an integral part of their activities. The schemes for such activities should be economically and technically viable. Wherever possible, activities undertaken by the societies should be dovetailed with the general schemes of the area. Technical and financial assistance should also be available to the societies from the general schemes.
28.	12.33	As the limits on rent prescribed under the tenancy laws of the States vary, no uniform or rigid pattern for the payment of a return for ownership of land can be suggested for the country as a whole. However, in no case should the return for ownership of land exceed the limits prescribed under the tenancy legislation of that State. Further, the income obtained for land should not be larger than the total rent obtained on the eve of the formation of the society, *i.e.* the return for ownership should be frozen at the initial

(1)	(2)	(3)
		level in the same manner as rents have been frozen under the tenancy laws.
29.	12.34	In the distribution of the surplus, full regard should be paid to basic cooperative principles. A larger part of the surplus should accrue to members in relation to the extent to which they actively participate in the operations of the society. Relatively lower priority should be given in this matter to the contribution of capital assets. The bulk of the surplus should be paid to members as bonus for work.
30.	12.35.	The administrative machinery and federations of farming societies should pay special attention to this aspect of the programme.
31.	12.36	Little experience is available in matters of budgeting, accounting, work procedures, types of investment etc. As these are complex issues, a deeper study of these aspects is needed. The National Cooperative College and Research Institute, Poona, should set up a well-equipped unit for this purpose. It should also impart training to key personnel engaged in this programme.
32.	12.37 & 12.38	There is need to rationalise and simplify the records to be maintained and, at the same time, to relate them more directly to the purpose of accounting, namely, more efficient farm management. It is suggested that a small technical group should go into the details of the records to be kept and formulate simple, but scientific, methods of so doing.
33.	12.40 & 12.41	The proper training of secretaries of societies as also their office-bearers and members is of vital importance to the programme. In the arrangements made for the training of secretaries greater emphasis should be given, in the existing six-months' course, to job-training in accounts and farm management. Special efforts should also be made to develop a knowledge of improved agricultural practices and skills in allied activities. Where the secretaries of societies have adequate agricultural experience, a short training course of four to six weeks, with special emphasis on accounts and farm management, may be organised.
34.	12.42	The main responsibility for member education should devolve on the National and State Cooperative Unions and federations of cooperative farming societies. Government should, however, make available the necessary financial assistance to them for carrying out this work.
35.	12.43	Short orientation course should be organised regularly, for block and other staff responsible for technical guidance.
36.	12.44	The National Cooperative College and Research Institute, Poona, should be equipped to organise short

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		orientation courses for key personnel.
37.	12.45	The Government and the National and State Co-operative Unions should formulate suitable measures to educate public opinion about cooperative farming.
38.	12.46 & 12.50	A rigid pattern of assistance, unrelated to the size of the farm, the resources of members and specific projects of development has proved unsuitable. To be meaningful, financial assistance should be related to the long-term plan of development formulated by the society and the resources of members. It should take into consideration the requirements of the society in their totality.
39.		A society, particularly of small holders would require assistance in the initial stages, for promoting and for establishing operations, which will have to be obtained from outside, *i.e.*, in the form of assistance, both grants and loans, from Government. On the other hand, an established society will require finances for development and current production and other business needs. All such requirements should be met in the normal manner from appropriate cooperative financing institutions. In addition, there are also a number of specialised agencies, which look after financing of particular activities appropriate to farming societies. It must be ensured that assistance from all such agencies flows to cooperative farming societies speedily and appropriately.
		(i) ASSISTANCE UNDER COOPERATION PLAN
		Joint Farming Societies
40.	12.53	The flate rate of Rs. 4,000 per society prescribed under the existing pattern of assistance, which works out to an average of Rs. 40 per acre, has proved inadequate. This was so in spite of the fact that a further diversion of the loan component of Rs. 3,750 made for construction of godown-*cum*-cattleshed was also allowed to be diverted for land development. Assistance for land development should therefore be related to the size of the farm and provided at an average rate of Rs. 100 per acre, subject to a ceiling of Rs. 20,000 per society.
41.	12.54	No changes are necessary in regard to the quantum of share capital participation by Government (Rs. 2,000) and the extent of managerial subsidy (Rs. 1,200).
42.	12.55	Whilst the provision of Rs. 5,000, for the construction of the godown-*cum*-cattleshed is adequate, such assistance should be given only after examination of the needs of each society. For purposes of an overall allocation of funds, provision might be made for about 25 per cent of the joint farming societies formed.

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		Collective Farming Societies
43.	12.56	As the needs of the collective farming societies are greater both in respect of overall requirements, and investment per acre, assistance for land development may be provided by Government at the rate of Rs. 150 per acre, subject to a ceiling of Rs. 30,000 per society.
44.		As these societies are generally in greater need of technical and managerial guidance, which is difficult to be found from within, the societies have generally to draw managers from outside. In view of this, the quantum of managerial subsidy may be raised from Rs. 1,200 to Rs. 2,100 per society, spread over a period of three to five years.
45.		As in these societies difficulties are experienced in raising share capital from members on a matching basis, Government contribution to share capital may be related, to the capital subscribed by the members. Subscribed capital may be collected from members in instalments and the Government contribution made as soon as the members have collected and paid 1/10th of the subscribed capital.
46.		As most of the collective farming societies would need the facility of a cattleshed-*cum*-godown, overall provision might be made, at the current rate, for assisting about 80 per cent of the collective farming societies that are formed.
47.		Whilst the outlay for the programme may be calculated on the above lines, the State Governments should assess the requirements of individual societies and provide resources to them.
		(ii) ASSISTANCE FROM OTHER DEPARTMENTS
48.	12.57	Cooperative farming societies should be treated as single units for purposes of assistance. Existing rules and procedures, should be modified without any delay, where necessary. Intensive efforts should also be made to ensure that the resources of the developmental departments are made available increasingly to cooperative farming societies.
49.	12.58 & 12.59	Steps such as those taken by Maharashtra Government, to provide cooperative farming societies with departmental resources for soil conservation, construction of community wells etc., should be adopted by other States.
50.	12.60	For the Fourth Plan, instructions have already issued that 75 per cent of the overall resources for programmes relating to poultry, piggery and dairying should be earmarked for the cooperative sector. A

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		further reservation should take place, in each State, to see that the requirements of cooperative farming societies are fully met and an integrated approach adopted for the formulation of schemes, providing of technical guidance etc.
51.	12.61	The Khadi and Village Industries Commission should review its existing procedures and take measures to ensure that the benefits derived by societies in some areas are more widely spread. In certain areas, where a large number of societies have been formed, the Khadi and Village Industries Commission should intensify its activities.
52.	12.62, 12.63 & 12.64	Central Cooperative Banks should direct their attention immediately to providing short-term credit to cooperative farming societies according to their production plans. As short-term credit alone would not be enough, medium term loans should also be provided.
53	12.65	The Land Mortgage Banks provide long-term loans to cooperative farming societies. This will mean, in many cases, amending the byelaws of primary land mortgage banks. In other cases, it might mean clarifying the liability of members in respect of the repayment of such loans even in the event of the society ceasing to exist after the period of pooling is over. The procedure suggested by the Maharashtra Apex Land Mortgage Bank to its primary banks, is commended for adoption.
54.	12.66	Members of cooperative farming societies may need short-term consumption loans, as also loans over a longer period in order to meet expenses connected with ceremonial and contingent purposes, old debts, etc. As far as short-term consumption loans are concerned, the practice suggested to service cooperatives in IADP districts should be followed: i.e., loans upto a limit of Rs. 50 per member should be advanced for consumption purposes. This amount should form part of the production programme against which loans are advanced and come within the overall credit limit of the borrower. Central cooperative banks should take a similar view in respect of the requirements of a cooperative farming society.
55.	12.67	As the members pool their entire land, a method should be evolved to assist them in the repayment of old debts and to meet ceremonial and contingent expenditure. In regard to old debts, it is suggested that, at the time of admission of a member, the society should obtain a declaration of his debts. Where it is possible for the society to secure the scaling down of these debts, this should be done. After

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		this, the society should assist the member in discharging the debt by advancing a loan to him against his return for ownership of land and remuneration for work. The loan may be recovered in suitable instalments. Where the debts declared are heavy and not easily repayable, the person concerned should not be admitted to membership. A similar procedure may be adopted by the society for providing loans to members for meeting ceremonial and contingent expenses.
56.	12.68	As the financing of cooperative farming societies is the legitimate function of the cooperative banking structure, it is necessary for it to work out the exact manner in which this programme can be assisted. For this purpose, it is essential to study further the various practices and procedures currently followed for issue of short, medium and long-term loans. The All India State Cooperative Banks' Federation should set up a small committee in consultation with the All India Union of Land Mortgage Banks to go into the details of this question as a matter of priority.
57.	12.70 to 12.73	The technical staff *viz.*, extension workers of the block, special staff appointed for cooperative farming staff of various other departments, have a vital role in this programme. The technical and administrative guidance provided to the societies should be adequate and of a high order.
58.	12.74	At the State level, there should be one whole-time Joint Registrar or Deputy Registrar, who should be assisted by an officer of the Agriculture Department.
59.		In States where 250 or more societies have been formed, state-level federations should be formed. These institutions should provide the technical know-how to the societies. For enabling the federation to provide such services, a grant of Rs. 40,000 may be given in the first year as suggested in the scheme formulated by the Ministry of Community Development and Cooperation. In the succeeding years, the assistance may be provided on a tapering scale.
60.	12.75	In districts where a large number of societies are organised, it would be desirable to provide technical guidance through the district federations of farming societies. Such a federation may be provided with the whole-time services of an agricultural graduate. Action should be taken at the earliest to set up district federations on the lines of the scheme formulated by the Ministry. As envisaged in the scheme, it is suggested that a grant of Rs. 10,000 may be given to each such federation for the first year. The assistance may, however,

(1)	(2)	(3)
		be tapered in the subsequent years. Where the federations set up a workshop or undertake other business activities, they may also be provided with a loan of Rs. 10,000.
61.	12.76	If, in any single district an adequate number of societies does not exist to warrant the formation of a federation, a federation may be formed for two or three contiguous districts or for a division.
62.	12.77	At the project level, the special staff for the programme should include one worker of the extension officer rank. In addition, one village level worker should be appointed for each group of 10 societies.
63.	12.73	At present, no special arrangements exist for non-pilot societies. It is suggested that one village level worker should be posted for every 10 such societies. His headquarters should be located in the light of local conditions.
64.	12.79	It must also be ensured that the block staff and the various technical officers of the district, take special interest in this programme. The job charts of extension staff should provide for making available technical guidance on a continuing basis. The Block Development Officer should be responsible for seeing that the societies formed are adequately guided and assisted.
65.	12.80	Panchayati Raj bodies, like the Zila Parishads and Panchayat Samitis should also be associated closely with the programme. They should review their problems periodically and resolve their difficulties.
66.	12.81	The programme of cooperative farming has immense scope on government waste lands, surplus lands and lands reclaimed as a result of large irrigation projects. It is essential that Government itself sets an example by encouraging cooperative farming on lands under its control.
67.	12.82	Whilst the policy of the Government of India to utilise Government waste lands for cooperative farming has been clearly laid down, the implementation of the policy leaves much to be desired. This gap should be bridged.
68.	12.83.	Wherever government waste lands are available in compact blocks, forming viable units, these be allotted to cooperative farming societies. In making such allotment the priorities fixed by the State Government in this regard to the various categories of persons entitled to such lands, should be followed.

(1)	(2)	(3)
69.		The allotment should be made promptly and the land should be given on a permanent or long-term basis. It should be ensured that the lands allotted can be cultivated in an economic manner. Failing this, the societies will face the problems of high cost and low returns.
70.	12 84	Where large tracts of Government lands have reclaimed as by the Rajasthan Canal and Chambal projects, a sizeable area should be earmarked for cooperative farming. It should be possible to plan and develop such areas as models of agro-industrial enterprise. Similarly, special programmes should be formulated for areas covered by Tungabhadra project. Early steps should be taken to implement the schemes already prepared for these areas. In areas where resettlement of displaced persons is being undertaken, as in Dandakaranya, cooperative farming should be introduced.
71.	12.85	In Maharashtra, a beginning should be made to introduce cooperative farming on the lands acquired by the State Government as a result of the imposition of ceilings on the holdings of private sugar factories.
72.	12.86	The working of stagnant and disintegrating societies should be carefully examined and steps taken to put them on the right lines. As such societies create an adverse reaction all round, this aspect of the programme should receive the closest attention.
73.	12.88	For stabilising the programme, cooperative farming societies would need careful nursing and guidance; measures should also be taken to ensure that the benefits of joint management continue to flow over the years in an equitable and planned manner.
74.	72.89	The areas of success have been those in which there was a conjunction of favourable circumstances. Having discovered these areas, special attention must be paid to conservation of results achieved and utilisation of the favourable climate for further progress. It should also be possible to find out other areas in which all these factors are present to some extent. A programme of such purposeful selection of areas is recommended for initiating and establishing intensive programmes in the Fourth Plan.
75.		At the same time the wider effort needed for promoting the programme need not be stopped. Such effort, if conducted continuously, with discrimination, is likely to yield at least some results in unexpected quarters. Moreover, the work of dissemination of ideology which is of vital importance would be greatly assisted by such widespread effort.

(1)	(2)	(3)
76.	12.90	The programme is in its infancy and would take another 10—15 years before a significant impact is made on the country as a whole. It is, therefore, emphasized that results should not be expected hastily and that there are no short cuts to solving the problems of marginal and submarginal cultivators.
77.	12.91	Most of the successful societies are in the initial stages of their developments and special efforts should be made to see that they make continuous progress. The programme in relation to both the established successful areas and potentially successful areas must be intensive. In these areas, plans for development of each individual society must be drawn up separately, in detail, and financial assistance, technical guidance etc. must be ensured. In such of the areas, the formation of a further 50 to 60 societies is envisaged.
78.	12.92	Besides the programme of intensive development consolidation and reorganisation of the movement along right lines should receive the utmost attention. At present, the programme is under way in about 300 pilot projects. In addition to the reorganisation of those amongst the existing societies which are defective, it should be possible to organise 10 to 15 new societies in the pilot projects already selected. With purposeful selection, the programme may be extended to contiguous blocks and other suitable areas in each of which another 10 to 15 societies should be formed over a period of 5 years.
79.	12.93	The programme of cooperative farming on government waste lands, surplus lands, reclaimed lands etc. will depend largely on the initiative of the Government.
80.	12.94	In the Fourth Plan, about 10,000 new societies should come into existence, if support and guidance are made available to the programme in the manner outlined in the report.

APPENDICES

APPENDIX I

(referred to in paragraph 1.2 of Chapter I)

No. F-10-9/63-CF

GOVERNMENT OF INDIA

MINISTRY OF COMMUNITY DEVELOPMENT AND COOPERATION

(DEPARTMENT OF COOPERATION)

Krishi Bhavan, New Delhi, Dated the 9th July, 1963

MEMORANDUM

The National Cooperative Farming Advisory Board set up by the Government of India formulated a scheme of assessment and evaluation of progress of cooperative farming societies and evaluation of pilot projects. The Board had also recommended that at the central level, in the initial stages *i.e.* for the first three years, the responsibility for processing of the data, progress, observation and analysis, should be with the Board. The Board should discharge this responsibility through a committee which should be so constituted and allowed to function that its findings inspire general confidence. More recently, the Conference of State Ministers, incharge of cooperation, 1963, has also recommended that arrangements should be made for a systematic and careful evaluation of the progress achieved in pilot projects from time to time.

2. The Government of India have accepted the recommendations of the National Cooperative Farming Advisory Board and the recommendations of the State Ministers incharge of cooperation and decided to set up a committee of direction for assessment of progress of pilot projects. This Committee will submit its report to the National Cooperative Farming Board.

3. The composition of the committee will be as follows:—

Chairman—Prof. D. R. Gadgil.

Members—

Prof. A. M. Khusro, Institute of Economic Growth.

Shri Ameer Raza, Joint Secretary, Ministry of Food and Agriculture.

Sardar Gurbaksh Singh.

Prof. J. P. Bhattacharjee, Director, P.E.O., Planning Commission.

Shri S. C. Chaudhri, Economic and Statistical Adviser, Ministry of Food and Agriculture.

Member-Secretary—Cooperation Commissioner (Dept. of Cooperation).

The following will be the terms of reference of the committee:—

(a) To examine the question of (i) base line survey regarding economic condition of members, (ii) progress of a society *vis-a-vis* other societies and individual farms, (iii) attitude survey and to devise methods, techniques and organisational set up for the same;

(b) to analyse the data collected in the field and formulate conclusions;

(c) to report the achievements and difficulties of the programme and suggest measures for solving the problems;

(d) to make or help in the detailed study of the specific operational aspects, *e.g.* preparation of production programmes, employment schemes, cooperative farm management, etc. and

(e) to undertake such other cognate measures as are germane and relevant to the scheme of assessment of progress and evaluation of pilot projects.

4. Subject to its control, direction and superintendence, this Committee may appoint sub-committees to deal with different aspects of the programme. The sub-committees may coopt for specific purposes persons who have expert knowledge of the problem or appropriate field experience. The Committee may meet as frequently as may be necessary.

5. Besides attending the meetings of the Board, the members of the committee may visit pilot projects and training centres connected with cooperative farming to supervise the processing of the data and suggest improvements whenever necessary.

6. The member-secretary of the National Cooperative Farming Advisory Board will act as secretary of this Committee and will be responsible for implementing the decisions of the committee.

7. The term of the committee expires on 30th June, 1965.

(Sd.) M. R. BHIDE
Secretary to the Government of India

To

1. Prof. D. R. Gadgil, Gokhale Institute of Politics and Economics, Poona-4.
2. Prof. A. M. Khusro, Institute of Economic Growth, University Enclave, Delhi-6.
3. Sardar Gurbaksh Singh, C/o Progressive Workers Cooperative Farming Society, Village Khempur, Post Office and Tehsil Bilaspur, Distt. Rampur (U.P.).
4. Sh. J. P. Bhattacharjee, Director, P.E.O., Planning Commission.
5. Shri S. C. Chaudhri, Economic and Statistical Adviser, Ministry of Food and Agriculture.
6. Planning Commission.
7. Ministry of Finance.
8. P.S. to Minister.
9. P.S. to Deputy Minister.
10. All members of the National Cooperative Farming Advisory Board.
11. D.I.P.R./Editor, Kurukshetra/Information Officer.

APPENDIX II

BROAD GUIDE LINES ABOUT THE OBJECTIVES AND THE REQUIREMENTS OF THE SURVEY

(Referred to in paragraph 1.6 of Chapter 1)

ASSESSMENT OF PROGRESS AND EVALUATION OF COOPERATIVE FARMING SOCIETIES IN PILOT PROJECT AREAS

Introduction—Cooperative farming aims at increasing agricultural production and employment particularly among the small farmers and landless cultivators. It is voluntary in character, democratic in management and constructive in approach. It necessarily involves pooling of land and joint cultivation which facilitates a more rational use of resources, economies of scale and adoption of scientific methods of agriculture. To demonstrate the advantages of cooperative farming to the farmers, 318 carefully planned pilot projects are to be organised at the rate of one per district during the third Plan. These projects, organised under varied conditions, would facilitate the evolution of suitable methods of techniques of organisation, operation and management. The pilot projects are to act as catalytic agent for further expansion.

2. For planning and promoting the programme of cooperative farming, a National Cooperative Farming Advisory Board has been constituted. On the recommendation of the National Cooperative Farming Advisory Board, the Government of India have set up a Committee of Direction for assessment of progress and evaluation of cooperative farming societies in pilot project areas under the chairmanship of Prof. D. R. Gadgil.

3. *Objectives*—A scheme for ascertaining the progress of cooperative farming societies and evaluation of pilot projects has been formulated and certain objective criteria or tests have been laid down. For collecting the data, membership and society schedules were also formulated. The main features of the scheme are:

(a) Evaluation and assessment of progress of pilot societies should have the following objects:

  (i) Whether the society as an institution is making steady progress and has achieved its main purpose of increasing production, employment and income.

  (ii) Whether the benefits have accrued to members equitably and whether the society has been able to create conditions so that the members can contribute their best.

(b) The data obtained should facilitate comparison:

  (i) Over a period of time by the society as well as its members and

  (ii) between the various cooperative farms within and outside the State.

(c) The progress has to be ascertained with the help of

(i) economic indicators and

(ii) attitude survey..

(d) For facilitating comparison, a base line survey regarding condition of members at the time of their joining the society was to be made for judging the efficacy of the co-operative farming over individual cultivation.

(e) While a base line study regarding the economic condition of the members was essential at the time of assessment, it was considered neither necessary nor feasible to conduct the attitude survey at the time of the commencement of the pilot project. A survey regarding attitudes and other sociological factors can be carried out when the societies have worked for some time.

4. The evaluation is expected to bring to light in good time weaknesses, if any, in the programme and the organisation so that the necessary correctives can be applied and the experience gained, can be utilised in the proper development of the future pilot projects.

5. *Period and Scope of Survey*—Initially the survey is to be carried out for two years, *i.e.*, 1963-64 and 1964-65. 156 pilot projects were started in the first two years of the Third Plan. About 70 pilot projects are working for more than two years. A list of these 70 projects is enclosed. In the first instance, it is proposed to start evaluation in two pilot projects per state excluding Jammu and Kashmir State.

6. The preliminaries for undertaking the survey such as formulation of the questionnaire, appointment of staff, selection of pilot projects have to be completed by the end of September, 1963 and field investigations should start from the 1st of Oct. 63. The centres are to submit the first evaluation report by the end of Feb. 64 to the Committee of Direction.

7. *Sampling Design*—Selection of the pilot projects will be on the basis of a purposive sample and convenience. The basic sample will be pilot project. The sub-sample of societies and members will be drawn from basic sample. The survey should cover societies in the pilot project areas which were working on June 62 or earlier.

8. A sample of old cooperative farming societies, if any, working in the pilot areas for 3 years and have stabilised their position should also be included. In case such societies are not available in the project they may be selected from outside the pilot block or blocks preferably in the same district. The final selection of the places will be made by the Member-Secretary of the Committee of Direction in consultation with the State Governments and the Registrar of cooperative societies.

9. *Baseline Data*—It would be appropriate to proceed on the assumption as if the base line data has not been collected as the data collected so far appears to be defective and incomplete in many respects. The base line data already collected for the societies may be used after checking.

10. *Field Studies and Observations*—Apart from collection of basic data and canvassing information on the questionnaire, the field investigator should stay at the headquarters of the project. He

should visit the societies and closely study their working during important agricultural operations. A close and constant observation of the working of the societies and a study of the attitude of members by making the maximum number of night halts in the village is called for. Since the study of attitudes is a very difficult matter, the field investigators should secure their confidence before eliciting information.

11. *Key Points of Survey*—Evaluation of the selected societies will be based on the study of two factors *viz.* (i) economic indicators and (ii) attitude survey. Some of the key points which should be covered by the survey are indicated below. In this connection the detailed questionnaire formulated by the Nijalingappa Committee may also be referred to.

A. *Organisation:*
  (i) Preparatory work; education of farmers; creation of atmosphere,
  (ii) voluntary character—direct or indirect pressures used; their nature and extent,
  (iii) motivating factors,
  (iv) role of government officers and non-officials,
  (v) who gave the lead.

B. *Membership and its distribution*
  (i) caste—*inter-se* relationship among members; is it a family affair or a society formed by a few friends or a group or is it a society of small and middle farmers,
  (ii) classes—owner-cultivators, non-cultivating owners; tenant cultivators, landless, sympathisers.

C. *Size of the Farm—Viability*

D. *Economic and Social Status*
  (i) classification of members by landed property (size-groups of land pooled);
  (ii) ownership pattern of the land pooled in the society;
  (iii) *extent of identification with the society*
    (a) Details of land and other assets pooled and/or kept outside the society.
    (b) Quality of land pooled in the society and kept outside for personal cultivation;
  (iv) period for which the land is pooled and the terms and conditions thereof;
  (v) whether the bulk of the membership consists of small farmers or landless or both should specifically be examined.

E. *Cooperative Farm Management*
  (a) *Lay out*
    (i) Layout of the farm before joint cultivation and thereafter.
    (ii) Number of cultivating units before joint cultivation and after pooling of land.

(b) *Removal of Field*

(i) Boundaries and the extent of increase in the area of cultivation.

(ii) Economies of scale through consolidation of holding.

(iii) Method of cultivation.

(c) *Whether the Farm is cultivated*

(i) as one unit;

(ii) by dividing into blocks; or

(iii) a part of the agricultural operations are made jointly;

(iv) cultivated individually.

(d) *Cultivated individually*

(a) *Agricultural implements*

(i) The extent of improved agricultural techniques; improved implements; seeds, fertilisers, compost manures; green manure; expansion of irrigation facilities; soil conservation, use of pesticides, insecticides;

(ii) Permanent improvements on lands, such as sinking of wells, installation of pumps, conservation of dry lands into wet lands, extent of investment made on each item of development.

(b) *Agro-Industries*

(i) Agricultural ancillary activities other than agricultural sheep *viz.*, rearing, poultry, piggery, industries, dairying, kitchen garden etc., khadi and village industries.

F. *Work Distribution*

(i) The method by which work is distributed among members and casual labourers;

(ii) How is the work assigned and supervised;

(iii) Role of the members of the Managing Committee and the Secretary in the work distribution, supervision and assessment of performance;

(iv) Categorise the membership as under:

(a) members who do not actually work on the farm but have only pooled the land;

(b) members who do not work on the farm but take part in administration, supervisory and accounting functions:

(c) members who do only physical work;

(d) members who go out of the farm for employment;

(v) The number of absentees and non-working members should not exceed ¼th of the total membership.

(iv) Valuation and assessment of work:

(a) method by which the work of the members is assessed and remuneration paid;

(b) incentives for good work and deterrants for bad workers.

N.B.—The members and the dependents capable of working may be taken into account.

G. *Production*

(i) Crops grown on the farm before and after the formation of the society.

(ii) Dry and Irrigated Crops (Specify the quality and value thereof of all the produce received including fodder, green manure etc., etc.).

(iii) The prizes or other recognition etc. won in the crop competition or results of crop cutting experiments etc., if any, may be indicated.

(iv) Assistance rendered by the Agriculture Department in the implementation of the production plan.

H. *Disposal of Produce*

(i) Produce distributed among members;

(ii) Sales;

(iii) The method by which the produce is marketed and the extent of marketing costs etc.

(iv) Is the produce sold through the marketing society. If yes, have any benefits accrued. If not the reasons *e.g.*, whether the marketing society is not functioning well or the office bearers of the farming society have other connections.

I. *Capital Formation*

(i) Distribution of profits and income between various factors of production

(a) land owners;
(b) working members;
(c) for capital formation;
(d) property income on land paid to members;
(e) investments in productive assets and others.

J. *Direct Economic Gains*

Extent of economic effects resulting from the organisation of cooperative farms in respect of the following:

(a) increased production;
(b) reduced cost of cultivation;
(c) greater capital formulation;
(d) increased individual incomes;
(e) increased labour inputs;
(f) mechanisation;
(g) employment;
(h) subsidiary industries etc.
(i) changes in food habits and standard of living;
(j) social effects;
(k) equitable distribution.

K. *Welfare*

(a) Supply of vegetables, milk, eggs at concessional rates.
(b) Supply of medicines to members, books to children.
(c) other activities.

Attitude Study

(i) Has the cooperative fostered social cohesion, close contact and mutual obligation among the members;
(ii) *inter-se* relationship among the members (working, non-working), office bearers, teams and groups;
(iii) relationship of the society and the village community;
(iv) relationship of the members with one another and within members of the same family;
(v) influence of women on work and other aspects;
(vi) initiative and interest of the members in the farm work;
(vii) reaction of non-members to the working of the society and its members;
(viii) leadership pattern and its effect.

General

(ix) relationship of paid secretary or paid manager with members, office bearers and M.C. members;
(x) are there any trends towards concentration of power in one or two men; who wields the power and how it is exercised.
(xi) the extent of effective participation by the members in decision making.
(xii) Tensions, if any, types and its causes.

L. *Assistance*

Extent of financial assistance received from various sources:

(i) cooperative agencies;
(ii) government departments;
    (a) cooperatives;
    (b) blocks;
    (c) agriculture;
    (d) irrigation etc.
(iii) Other institutions, Khadi and Village Industries Board etc.
(iv) Impact of assistance—
    (a) on the work of the society,
    (b) on the members.

M. *Technical Guidance*

(i) The extent of technical guidance received from the extension staff of the C.D. blocks and other developmental departments in respect of the following:
    (a) formulating agricultural production programme, including crop patterns and land improvements measures, *e.g.* soil conservation, contour bunding, field re-arrangements, irrigation channels, conservation and utilisation

of local resources, such as compost, waste materials, green manuring etc.

- (b) preparing a scheme of mixed farming, such as poultry farming, dairying, animal husbandry;
- (c) drawing up schemes of agro-industries, cottage and small scale industries, keeping in view the issue resources, talent and the local demand;
- (d) securing funds available under block budget, G.M.F. scheme, Khadi Commission, etc.
- (e) helping the societies in solving their day to day problems;
- (f) maintaining friendly relations with the workers and the members; and
- (g) educating the farmers about the efficacy of cooperative farming.

(ii) Impact of technical guidance—good and bad effects.

N. *Education*

- (i) Education of members in cooperative farming and office bearers.
- (ii) The role of political parties in favour of the programme and those opposed to it.
- (iii) Role of other organisations—Sarva Sewa Sangh etc.

10. *Study of State Policies*—Before formulating the questionnaire and taking up evaluation, it would be advisable for the agro-economic centres to get a complete set of instructions issued by the Registrar, Cooperative Societies of the state concerned. A careful study of these would indicate that in some cases the state governments have made certain changes in the policy and procedures. Such changes should be listed and the effect thereof clearly brought out in the analysis.

For instance, one or two state governments have taken the view that pooling of all land held by a member in the area of operation of the society should not be made obligatory or the percentage of absentee and non-working members of a society should not be restricted to 25. The staff of the cooperative department and other organisations who promote cooperative farming would only, and rightly too, follow the instructions of the state government.

It is, therefore, important that the policy approved by the state government is studied by those who take up the evaluation. It would also be worth their while to obtain a copy of the proceedings of the State Advisory Boards for cooperative farming which have been set up in most of the states.

11. *Analysis and Suggestions*—The factors and tendencies which would lead to success or failures should be pointed out. Suggestions for changes in the policy, procedure, if any, may be made.

STATEMENT SHOWING THE DISTRICTS AND BLOCKS SELECTED FOR PILOT PROJECTS IN COOPERATIVE FARMING DURING 1961-62 UNDER THE THIRD FIVE YEAR PLAN

Sl. No.	Name of the State	Districts	Community Development Blocks
1	2	3	4
1.	Andhra Pradesh	1. Nalgonda	1. Nalgonda
		2. Guntur	2. Guntur
		3. Cuddapah	3. Khammam
		4. Kurnool	
		5. Srikakulam	
		6. Khammam	
2.	Assam	1. Nawgong	1. Nawgong
		2. Sibsagar	2. Sibsagar
3.	Bihar	1. Ranchi	1. Ranchi
		2. Purnea	2. Purnea
		3. Shahabad	3. Shahabad
		4. Darbhanga	4. Darbhanga
		5. Motihari	5. Motihari
4.	Gujarat	1. Surat	1. Surat
		2. Baroda	2. Baroda
		3. Mehsana	3. Mehsana
		4. Bhavnagar	4. Bhavnagar
		5. Amreli	
5.	Jammu & Kashmir	1. Jammu	1. Jammu
6.	Kerala	1. Cannanore	1. Cannanore
		2. Kozhikode	2. Kozhikode
7.	Madhya Pradesh	1. Durg	1. Durg
		2. Raisen	2. Raisen
		3. Shajapur	3. Shajapur
		4. Khargone	4. Khargone
		5. Khandwa	5. Khandwa
8.	Madras	1. Madurai	1. Madurai
		2. Ramanathapuram	2. Ramanathapuram
		3. Tirunelveli	
9.	Maharashtra	1. Dhulia	1. Dhulia
		2. Chanda	2. Chanda
		3. Wardha	3. Wardha
		4. Kolhapur	4. Kolhapur
		5. Jalgaon	5. Jalgaon
		6. Buldhana	6. Buldhana
		7. Bhir	7. Bhir
		8. Poona	8. Poona
		9. Ahmednagar	9. Ahmednagar
		10. Nanded	10. Nanded
10.	Mysore	1. Bangalore	1. Bangalore
		2. Mysore	2. Mysore
		3. Dharwar	3. Dharwar
		4. Raichur	4. Raichur
		5. Tumkur	5. Tumkur
11.	Orissa	1. Puri	1. Puri
		2. Cuttack	2. Cuttack
12.	Punjab	1. Patiala	1. Patiala
		2. Jullundur	2. Jullundur
		3. Karnal	3. Karnal
		4. Hoshiarpur	4. Hoshiarpur
13.	Rajasthan	1. Ganganagar	1. Ganganagar
		2. Pali	2. Pali
		3. Bharatpur	3. Bharatpur

1	2	3	4
14.	Uttar Pradesh	1. Gorakhpur	1. Gorakhpur
		2. Gonda	2. Gonda
		3. Unnao	3. Unnao
		4. Rampur	4. Rampur
		5. Pilibhit	5. Pilibhit
		6. Varanasi	6. Varanasi
		7. Allahabad	7. Allahabad
		8. Meerut	8. Meerut
		9. Shahjahanpur	9. Shahjahanpur
		10. Nainital	10. Nainital
		11. Bulandshahr	11. Bulandshahr
15.	West Bengal	1. Burdwan	1. Burdwan
		2. Nadia	2. Nadia
		3. Birbhum	3. Birbhum
	UNION TERRITORIES		
16.	Delhi	1. Delhi	1. Delhi
17.	Himachal Pradesh	1. Mandi	1. Mandi
		2. Mahasu	2. Mahasu
18.	Manipur	1. Manipur	1. Manipur
19.	Tripura	Nil.	Nil
20.	Pondicherry	Territory not divided into Districts	Territory not divided into Districts.

APPENDIX III

STATEMENT SHOWING NATURE OF IRRIGATION ACTIVITIES

(referred to in paragraph 11.31 of Chapter XI)

State	Name of Society	New Wells constructed/ unde completion	Wells repaired/ deepened	Pumping Sets Installed	Tubewells Sunk	Remarks
1	2	3	4	5	6	7
		JOINT FARMING SOCIETIES				
Madras	Krishnanpatti	3		1		
	Kanchipuram	1		3		
	Kaveripuram	2		2		
Total		6	N.A.	6		
Andhra Pradesh	Godavari			1		
	Krishna		1	1		
	Kolleru			1		
Total			1	3		
Kerala	Kadkkavoor		N.A.			Channels repaired (Rs. 575)
Mysore	Sarvodaya	1		2		
	Tavarekere			1		
	Chakrabhavi			1		
	Halahalli	1		1		
Total		2		5		
Uttar Pradesh	Santosh			2 (oil E.) 1 (Pump-set)		
	Sadapur			1		
	Kedarpur					Digging of Nalla to irrigate 10 acres.
	Barbatpur	N.A.		2		
	Rampur	3				
	Chandpuri					3 Chain-pipes installed.
	Levanagari			1		
	Santnagar			1		
	Kiran					Irrigation facilities were available to the whole of cultivated area through tubewells—Details N.A.
Total		3		8		

सत्यमेव जयते

1	2	3	4	5	6	7
Punjab ..	Nanakpur ..			1		
	Vyas		1	..	1	Pipelines constructed
	Tandoori			3		
	Gobindpur ..			2	1	
	Badshahpur ..			2		90 acres irrigated
	Jiwan			3		
	Taravati ..			3		
Total			1	14	2	
Assam ..	Suratwal ..					Dug a tank (Rs. 500)
	Rajlakshmi ..	4			1	
Total		4	N.A.		1	
Bihar ..	Narsinghpur ..			1	2	
	Kataria ..				1	
	Burhanpur ..	3				
	Satpura ..					Assistance sanctioned for 4 wells.
Total		3		1	3	
Orissa ..	Jagannath ..					Repaired water Channel (500 ft.)
	Annapurna ..			1		
	Mithagaon ..					Constructed a channel
	Lakhanpur ..			2		Dug a channel
Total		N.A.	N.A.	3		
Rajasthan ..	Chandrawat ..	1				4 societies had started. digging wells. Steps had been taken for deepening old wells and installing pumping sets by three societies. Total amount spent Rs. 25,782.
	Rajwas ..	1				
	Ambikaji ..	1				
	Khera	1				
Total		4				
Gujarat ..	Azad	1		1		Three societies in Sava kundla project had brought under irrigation 360·0 acres of land.
	Bhagatpur ..		1			
	Narayanswami ..			3		
Total		1	1	4		
Maharashtra..	*Dhulia District*					
	Vijayagopal ..	1	2			
	Ekumbhe ..		1			Dug a tank
	Samantnagar ..	1	1			
	Rampur ..		2			
	Ranwadi ..	2				
	Wardha District					
	Gangakhed ..	1	1			
	Lahanegaon ..	1				2 societies fixed pipelines.

1	2	3	4	5	6	7
	Societies surveyed by canvassing schedules in Dhulia Wardha (27)	9/9 societies.	14/10 societies.	49/23 societies.		Only 6 societies coul not increase irriga tion.
Total		15	21	49		
Madhya Pradesh	Bansikheri ..			1		Dug a tank
	Kanodia ..	1		1		
	Chandrakheri ..	7		1		
	Dhol	6				
	Sukarma ..	3				
	Pahari ..	1		1		
	Lakhera ..	1		1		
	Indrapur ..			1		Dug a tank.
	Suratgarh ..	3		5		
	Dhola		1	2		
	Sharda ..	1				
Total		23	1	13		
Grand Total (Joint Farming Societies)		61	25	106	6	4 societies dug tank 9 societies fixed pipe lines or constructed channels.

COLLECTIVE FARMING SOCIETIES

1	2	3	4	5	6	7
Kerala ..	Kanjoor ..	2				Dug a tank (Rs.3,384)
Uttar Pradesh	Dhruv ..			1	2	
	Deepak ..			2		
Rajasthan ..	Sanganer 1 ..	1				
	Sanganer 2 ..	1				
	Bahadurgarh 1 ..	1				
	Bahadurgarh 2 ..	1				
Total		4				
Gujarat ..	Datanagar ..	1		2		
	Girgaon ..	1		1		
Total		2		3		
Maharashtra ..	Dongardhara ..	1				Dug a tank
GRAND TOTAL		9		6	2 societies	2 societies Dug tanks

सत्यमेव जयते

L/B(D)210MofCD&C—2,500—1-2-66—GIPS